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ABSTRACT

Early Childhood Research & Practice (ECRP), a peer-reviewed, Internet-only journal sponsored by the Early Childhood and Parenting Collaborative (ECAP), covers topics related to the development, care, and education of children from birth to approximately age 8. The journal emphasizes articles reporting on practice-related research and on issues related to practice, parent participation, and policy. Also included are articles and essays that present opinions and reflections. Following a memoriam for leading early childhood care and education researcher Susan Kontos, the bulk of the journal issue compiles the following five articles on research and practice: (1) "Creating the Conditions for Success with Early Learning Standards: Results from a National Study of State-Level Standards for Children's Learning Prior to Kindergarten" (Catherine Scott-Little, Sharon Lynn Kagan, and Victoria Stebbins Frelow); (2) "Supporting Vulnerable Learners in the Primary Grades: Strategies To Prevent Early School Failure" (Melissa Stormont, Linda Espinosa, Nancy Knipping, and Rebecca McCathren); (3) "The Role of Child Development and Social Interaction in the Selection of Children's Literature To Promote Literacy Acquisition" (C. Denise Johnson); (4) "Discriminant Validity of A Community-Level Measure of Children's Readiness for School" (David A. Murphey); and (5) "Reaching Out to Fathers: An Examination of Staff Efforts That Lead to Greater Father Involvement in Early Childhood Programs" (Stephen Green). The issue concludes with a multi-media feature detailing a project by Indiana kindergartners, "The Llama Project" (Candy Ganzel and Jan Stuglik.) (HTH)

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In Memoriam: Susan J. Kontos

Susan J. Kontos, one of the country's leading researchers in early childhood education and care, died September 12, 2003, following a remarkable nine-year battle with cancer. She was 53 years of age. Susan had been on the Purdue University faculty since 1985 and previously held faculty positions at the Pennsylvania State University and the University of Northern Colorado.

Susan's meticulous observational studies of children and teachers in early childhood programs helped shape current thinking about indicators of program quality and set high standards in classroom research. Her collaborative, multi-site study of the quality of family child care and research on inclusion and personnel preparation also contributed in significant ways to policy and practice considerations. At the time of her death, she was principal investigator of two large federally funded studies, one on the effects of the Project Approach and one on community contexts of child care quality.

Susan's numerous contributions to the field included editorial positions with the *Early Childhood Research Quarterly, Young Children, Early Childhood Research & Practice,* and *Child and Youth Care Forum,* and service on key state-level early childhood committees in Indiana. She was an enthusiastic mentor of graduate students and recipient of an outstanding undergraduate teaching award at Purdue.

Susan's energy, intellect, and commitment will be widely and deeply missed. Our thoughts are with her daughter, Wynne, and her family.

Douglas R. Powell
Distinguished Professor, Purdue University

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Creating the Conditions for Success with Early Learning Standards: Results from a National Study of State-Level Standards for Children's Learning Prior to Kindergarten*

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Abstract

Historically the field of early care and education has focused on one type of standards—program standards to define requirements for important features of the services children receive. Recently another type of standards has come to the forefront of early care and education policy and practice—early learning standards that define expectations for children's learning and development. This article reports the results of a national study undertaken to collect data on early learning standards across the country. Using the position statement on early learning standards recently adopted by the National Association for the Education of Young Children and the National Association of Early Childhood Specialists in State Departments of Education as a framework for analyzing data from the study, this article presents data on which states have early learning standards, how they were developed, and how they are being used. The article suggests that many of the "conditions for success" described in the position statement are being addressed but also outlines several recommendations for improvements in how early learning standards are developed and implemented.

Introduction

The field of early childhood education has a long and rich history of observing and describing the development of young children. Seminal works by theorists such as Froebel, Pestalozzi, and Piaget articulated stages of development and described typical or expected trajectories of development. Recently, however, there has been a marked shift from the theoretical descriptions of how development should unfold to more explicit articulations of what is expected of children's development during the years before children start school. Recent findings from brain research; reports such as *Eager to Learn* (Bowman, Donovan, & Burns, 2001); and numerous studies such as the Perry Preschool project (Schweinhart, Barnes, & Weikart, 1993), the Abecedarian research (Campbell & Ramey, 1994; 1995), the National Institute of Child Health and Human Development study (2001), and the Cost, Quality, and Outcomes

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study (Cost, Quality, and Outcomes Study Team, 1995; Peisner-Feinberg et al., 1999) show that young children can, indeed, learn a great deal and that their development is highly impacted by the learning environment to which they are exposed. The potential for facilitating positive child outcomes coupled with the desire for accountability of funds invested in early care and education have led to increasing pressure for more explicit articulations of just what children should know, be like, and be able to do before they enter kindergarten.

Known as *early learning standards* (NAEYC & NAECS/SDE, 2002), these formal articulations of what is expected for children's growth and development differ significantly from the other type of standards that the early care and education field has had for several decades—program standards. Program standards provide criteria for important program features such as adult:child ratios, group sizes, and curricula. Although experts in the field may differ as to the specifics they recommend for program features, there is widespread agreement on the need for program standards and the general elements that should be included.

Early learning standards, however, are relatively new within the field of early care and education and somewhat contentious. First, the very nature of children's development does not lend itself to "standards." Preschool children's development often is uneven across developmental areas, with development in one area outpacing development in other areas. Furthermore, development often is sporadic. A child may make relatively little progress in one developmental area for a significant period of time and then suddenly master a series of skills or demonstrate more advanced characteristics almost overnight (Shepard, Kagan, & Wurtz, 1998). Second, children's development at this age is highly influenced by the environment to which they are exposed, and preschool children's home, community, and educational environments differ substantially (Kagan, Moore, & Bredekamp, 1995). Third, early childhood pedagogy has traditionally relied on child-centered or child-initiated approaches where the learning curriculum originates from the child's own unique developmental level and interests (Bredekamp & Copple, 1997; Lay-Dopyera & Dopyera, 1990; Schweinhart, 1988). Therefore, one might argue that "standards" for this age are counter to what we know about children's growth and development and what we have espoused as features of high-quality early childhood curricula.

Despite these concerns, pressure has been mounting to develop early learning standards. In the K-12 educational arena, standards-based education has become the norm over the past decade. Almost every state in the nation, plus the District of Columbia and Puerto Rico, have standards to outline what children should know and be able to do in kindergarten through grade 12 (American Federation of Teachers, 1999). Furthermore, federal, state, and local governments, along with numerous foundations and community organizations, have invested significant resources into providing early care and education services for children before they enter kindergarten (Doherty, 2002; Schulman, Blank, & Ewen, 1999). It seems reasonable, and perhaps inevitable in this age of accountability, that policy makers and others want to know just what children are supposed to be learning in these early care and education settings.

Standards that articulate expectations for what children should learn also have potential benefits beyond addressing pressures for increased accountability. They can clarify expectations for what should be taught, provide a common set of expectations for child outcome goals, and focus attention on important aspects of children's growth and development (Mid-continent Research for Education and Learning, 2003). Indeed, Ravitch (1995) argues that we commonly expect standards for things such as construction of public buildings and processing of drinking water because standards can protect the well-being of the public. Education can also be improved by clearly defining what is to be taught, expectations for what children will learn, and how they will demonstrate what they have learned.

NAEYC-NAECS/SDE Position Statement in Response to Recent Trends

Recognizing that early learning standards are becoming increasingly common and that there are significant concerns about what is contained in the standards and how they are used, the National Association for the Education of Young Children (NAEYC) and the National Association of Early Childhood Specialists in State Departments of Education (NAECS/SDE) issued a joint position statement on early learning standards in 2002. Titled *Early Learning Standards: Creating the Conditions for*

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Success, the position statement addresses the content of standards, how they should be developed and used, and the programmatic supports necessary to ensure that early learning standards are beneficial. The position statement is intended to provide policy makers, state education agencies, and other organizations guidance that can lead to development and implementation of early learning standards that maximize the potential benefits and minimize the risk of harm.

Purpose of the Study

This paper provides findings of a descriptive study of early learning standards in the United States. Data were collected on which states have early learning standards, what the standards contain, how they were developed, and how they are being used. Data from this study can inform us about the extent to which the "conditions for success" articulated in the NAEYC-NAECS/SDE position statement are present in states that have developed standards. The paper extrapolates from the data to draw some conclusions about the extent to which issues described in the NAEYC-NAECS/SDE position statement are being addressed in the field and provides recommendations to guide future standards development work.

Methodology

This descriptive study utilized data from multiple sources to gain a picture of early learning standards within each state. Telephone survey data were augmented by reviews and analysis of early learning standards documents. A telephone survey protocol was developed to determine (1) whether a particular state had early learning standards (or was engaged in a standards development process); (2) the impetus for the standards; (3) the nature of the standards; (4) the process of their development, including issues related to leadership, participation, and funding; and (5) how the standards are disseminated and implemented.

Recognizing the possibility that a standards development initiative might take place within a state under the auspices of any number of agencies or organizations, the research team triangulated data from interviews with representatives from three target groups: (1) the early childhood specialist in the state department of education, (2) the president of the state Association for the Education of Young Children (AEYC), and (3) the chief child care administrator in the state's lead child care agency. The strategy of collecting data from these diverse sources worked well, in that persons in different roles often provided different knowledge bases, perspectives, and data sources.

Initial contact was made through a letter to respondents to explain the purpose of the survey and provide a copy of the questions that would be addressed during the interview. Approximately 2 weeks after the letter was mailed to a respondent, a phone contact was made to schedule an appointment for the interview. During the interview, participants were asked to respond to a series of open-ended and closed-ended questions to describe any early learning standards activities in their state. The interviews were conducted between November 2001 and May 2002. A written summary of each interview was completed and either mailed electronically or faxed to respondents so that they could provide suggested changes for the write-up and then approve the way the write-up reflected their conversation with the researcher.

Respondents were asked to forward copies of early learning standards documents to the research team, along with any supplemental materials that might be available to support implementation of the standards. Materials were received from each of the states in which respondents indicated that their state had standards. Interview responses regarding the name of the standards, the age groups addressed, and the developmental domains and subject areas covered were confirmed by examination of the standards documents and any Web-based materials the respondent provided.

A total of 177 persons were contacted as potential respondents for the survey. Seventy-seven persons able to provide data regarding early learning standards in their state. The remainder either indicated that their states did not have early learning standards or that they were not informed sufficiently to answer the questions about their state's standards. Fifty of the 77 respondents who were able to answer questions

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about the standards in their states were early childhood specialists in state departments of education. Thirteen informants were child care administrators, and 14 were AEYC liaisons. Data were collected from more than one informant in 20 states. In these cases, the separate interview responses were compared, and respondents were re-contacted to clarify any discrepancies in the information provided.

Quantitative and qualitative data analysis techniques were used to extract themes or commonalities among the states. For the quantitative analysis, two primary strategies were used: (1) counts of the number of early learning standards documents that exhibited the specific characteristics examined or the numbers of respondents who reported a given response, and (2) ratings of standards on various scales that were developed to describe the nature of the standards.

Qualitative analytic methods were used to analyze responses to the open-ended interview questions. The research team studied the interview responses carefully, looking for emerging patterns, themes, and categories. A coding system was developed, and data were sorted according to "families of codes" (Bogdan & Biklen, 1998, p. 171). As a particular theme was identified, the team looked for consistency across multiple respondents within a state and then evidence of the theme in respondents' answers across multiple states.

Limitations of the Study

Several factors impact the efficacy of the findings from this study. First, the data are limited to what respondents told us in the interview, and their responses reflect their own perspective. Although we made every effort to find respondents within each state who could inform the work, we may have missed a key respondent and, therefore, have limited or biased data regarding an individual state. Second, considerable confusion exists within the field about early learning standards, with many persons not understanding the distinction between program standards and standards that describe expectations for children's growth and development. Furthermore, the nature of early learning standards varies tremendously. Therefore, respondents may not have fully understood the subject matter of this study and their responses may have been off topic, depending on their knowledge of the subject and our ability to clearly articulate the purpose of the study and the type of data we aimed to collect. Third, the standards development process in states is clearly a "moving target." This type of standards development is a relatively new phenomenon within the field, and many states are still in the standards development process. Our data were collected between November 2001 and May 2002 and, therefore, reflect where states were at the time of the interview, not necessarily where they are now in the process. Finally, we may have unintentionally minimized the variability among states in our reporting on the nature of the standards, their development process, and how they are being used. States are truly unique in how they have approached the issue of early learning standards. In our effort to extract themes from across the states, we may have inadvertently minimized the differences among states. Given these limitations, data from the study present a rich picture of early learning standards activities within states.

Findings

One significant question for the research team was the extent to which the four essential features of "developmentally effective" early learning standards outlined in the NAEYC-NAECS/SDE position statement are present in states' standards development/implementation activities. Therefore, our findings are presented within the framework of issues raised in the position statement. Following a brief discussion of which states had early learning standards at the time of the interview, findings related to the content of the standards; the process used to develop standards; implementation and assessment strategies; and supports for programs, professionals, and families are discussed. Finally, findings related to the potential risks and benefits outlined in the position statement are addressed.

Who Has Early Learning Standards?

Data indicate that a significant number of states have developed early learning standards and that there is

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wide variation in the status of standards within states. Some states have completed an early learning standards development process, while others have not begun to study the issue. Within states that have standards, some are revising their current standards, while others already have or are developing a second set of early learning standards for their state.

Table 1 indicates that 27 states had developed a document of some type to articulate expectations for children's learning and development in at least one developmental domain or content area for some age range prior to kindergarten entry. Two of the 27 states—Maine and Washington—have two separate sets of standards that were applicable for children before they enter kindergarten. Therefore, the total number of early learning standards documents available for review in this study was 29. States where respondents indicated that early learning standards had been developed and published were subdivided into two categories: standards that had been officially adopted or endorsed by a governing body or governmental agency at the time of the interview and states that had published standards that had not been officially adopted or endorsed. Nineteen states had standards that had been officially adopted or endorsed by government boards or agencies (Category I). An additional eight states reported that they had standards for at least one developmental domain but that the standards had not been officially adopted or endorsed at the time of the survey interview (Category II).

Table 1
Status of Early Learning Standards in States

Category I Have Standards That Have Been Officially Adopted or Endorsed	Category II Have Standards That Have Not Been Officially Adopted or Endorsed	Category III Standards in Process	Category IV No Early Learning Standards
Arkansas	California	Arizona****	Alabama
Connecticut	Colorado*	Delaware****	Alaska
Florida	Louisiana	Hawaii****	Idaho
Georgia***	Missouri*	Indiana****	Iowa
Illinois	Ohio**	Kentucky	Kansas
Maine*, ***	Oklahoma	Nevada	Montana
Maryland	Pennsylvania	North Carolina	Nebraska
Massachusetts***	Rhode Island	Oregon	New Hampshire
Michigan		Tennessee	North Dakota
Minnesota		Virginia****	South Dakota
Mississippi		Washington, DC	West Virginia
New Jersey**		Wisconsin	
New Mexico		Wyoming****	
New York			
South Carolina*, ***			
Texas			
Utah**			
Vermont***			
Washington***			

* Standards developed to address limited number of developmental/subject areas and standards addressing additional developmental/subject areas in process.
** Current standards under revision.
*** Two sets of standards in place and/or being developed.
**** Have published standards document since May 2001.

Data indicated that the standards development process is a relatively new phenomenon within the field. A few pioneer states (Michigan, Texas, Vermont, and Washington) had standards covering preschool-age

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children prior to 1996. The preponderance (18 out of 29 sets of standards) had standards that were finalized in 2000 or later. The early learning standards development process is also a "moving target." Four states (see states with * in Table 1) reported that they had early learning standards for one or more areas of development and were in the process of developing additional standards to address additional developmental/subject areas. For example, South Carolina reported that standards for mathematics had been completed and adopted by the State Board of Education and that the state was in the process of developing language arts, science, fine arts, and social studies standards. Likewise, Colorado had early learning standards addressing reading, writing, and math, with standards addressing social-emotional competence, science, and art in the development process. A few states that had standards in place were in the process of revising them (states with ** in Table 1). Three states with early learning standards in place fall into this category—New Jersey, Ohio, and Utah.

Data also reveal that a number of states are in the process of reviewing and, in some cases, developing additional sets. Maine, Massachusetts, and Vermont each had one set of standards that included standards for pre-kindergarten-age children within their K-12 standards. In these three states, respondents reported that efforts were underway to develop a second set of standards to better articulate standards for children younger than kindergarten age. Therefore, the data do indicate that a number of states are involved in reviewing and revising their standards, although it is not clear that the review process reflects a "systematic" approach as described in the position statement. It seems that the review/revision process is typically in response to dissatisfaction with current standards rather than systematic or regularly scheduled review/update processes.

In addition to this variation within the states that reported having published early learning standards, respondents from 12 states plus the District of Columbia (see category III in Table 1) indicated that their state did not have early learning standards at the time of the interview but that an initiative was in place to develop early learning standards. These states ranged from having just started a standards development process to those who were just short of publishing a document. Indeed, at least six of these "in process" states have completed their standards development process since the time of the interview (see states marked with **** in Table 1).

Finally, respondents from 11 states indicated that their states did not have published early learning standards and were not in the process of developing such standards at the time of the interview. A variety of explanations were provided by respondents in these states. Explanations ranged from practical (i.e., the state was involved in other initiatives such as developing program standards), to political (i.e., the state was a local-control state, and standards developed at the state level would not be used), to philosophical (i.e., concerns over potential negative impacts of standards to define expectations for children's growth and development).

Content of the Standards

The NAEYC-NAECS/SDE position statement indicates that developmentally effective early learning standards must include "significant, developmentally appropriate content and outcomes." The document emphasizes that standards must incorporate all developmental domains; emphasize content that has been shown to be important for children's learning and development; be based on knowledge of the process by which children develop in the early years; and include cultural, community, linguistic, and individual perspectives. An extensive content analysis would be necessary to determine the degree to which the early learning standards documents included in this research address each of these features. Although the current study did not include a detailed analysis of the content, relevant data on the nature of the standards were collected and are described below.

Developmental Domains. Data indicate that states have addressed a variety of developmental domains in their early learning standards (see Table 2). Respondents were asked to indicate which of the domains were included in their standards. In addition, we examined the actual documents to determine which developmental domains were addressed, using the National Education Goals Panel's developmental domain descriptions as indicators for what is included in each domain.

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Table 2
National Education Goals Panel Developmental Domains Included in Standards

State	Physical Health	Cognition	Approaches to Learning	Social-Emotional	Language
Arkansas	X	X	X	X	X
California	X	X	X	X	X
Colorado		X			X
Connecticut	X	X		X	X
Florida	X	X	X	X	X
Georgia	X	X		X	X
Illinois	X	X		X	X
Louisiana	X	X		X	X
Maine Learning Results Early Learning Results	 X X	 X IP*		 X	 X X
Maryland		X			X
Massachusetts		X			X
Michigan	X	X		X	X
Minnesota	X	X	X	X	X
Mississippi	X	X		X	X
Missouri	IP	IP	IP	IP	X
New Jersey	X	X		X	X
New Mexico	X	X		X	X
New York		X			X
Ohio		X			X
Oklahoma	X	X	X	X	X
Pennsylvania		X			X
Rhode Island	X	X	X	X	X
South Carolina		X			IP
Texas	X	X		X	X
Utah	X	X		X	X
Vermont	X	X	X	X	X
Washington ECEAP OSPI	 X	 X X		 X	 X X
Total	**20**	**27**	**7**	**19**	**28**

*IP = In process (at the time of the interview, the state was actively working on early learning standards addressing this domain).

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As shown in Table 2, all states except South Carolina and Missouri had developed standards that include more than one domain (both had early learning standards in process to address at least one additional domain). Seven of the states had standards that address all five developmental domains. Respondents eleven states reported that their standards cover four of the domains, and seven states reported that their standards cover two or three of the domains.

Language is the most common domain to be included in early learning standards. All of the states except South Carolina addressed this domain (and South Carolina had language standards in process). Cognition was also very commonly included in the standards (27 of 29 sets of standards). Physical health was the next most commonly addressed domain, with 20 of the 29 standards documents including this domain. The data indicate that the approaches-to-learning domain was the domain least likely to be addressed in the early learning standards. Of the 29 sets of standards, only 7 include approaches to learning. The social-emotional domain is the next least likely domain to be addressed, with 19 sets of standards covering social-emotional development.

Linkage to K-12 Standards. The position statement points out that effective early learning standards should reflect content that is meaningful and based on research from child development at the preschool age, rather than simplifying standards developed for older children. The statement also points to potential negative impacts of "back mapping" early learning standards from K-12 standards.

Although this study did not include a detailed content analysis of the standards, the data do indicate that states have made efforts to align their standards with K-12 standards. When asked, "To what extent are the early learning standards linked to or modeled after standards developed for your state's K-12 system?" respondents from each of the 27 states indicated that the early learning standards were in some way related to the K-12 standards. The way and the extent to which the standards were linked varied, ranging from actually being incorporated into the K-12 standards to using a similar format or including similar subject areas (see Table 3). Fifteen states had standards classified as being directly linked to the K-12 standards (the K-12 standards were part of the same document or reference numbers were provided to show where individual early learning standards related to specific K-12 standards). Seven states had early learning standards classified as moderately linked (for instance, the documents used subject areas or developmental categories that were the same as the K-12 standards), and seven states' early learning standards were classified as minimally linked (i.e., it was not obvious from the document nor the interview data precisely how the standards were linked to K-12 standards).

Table 3
Degree of Linkage to K–12 Standards

State	Direct Linkage	Moderate Linkage	Minimal Linkage
Arkansas		X	
California		X	
Colorado	X		
Connecticut			X
Florida	X*		
Georgia		X	
Illinois	X		
Louisiana	X*		

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Maine Learning Results Early Learning Results	X		X
Maryland	X		
Massachusetts	X		
Michigan	X		
Minnesota			X
Mississippi		X	
Missouri		X	
New Jersey	X*		
New Mexico			X
New York	X		
Ohio	X		
Oklahoma			X
Pennsylvania	X		
Rhode Island		X	
South Carolina	X		
Texas		X	
Utah			X
Vermont	X		
Washington ECEAP OSPI	X		X
Total	**15**	**7**	**7**
*Includes reference number for K–12 standards rather than actual standards themselves.			

Specific Ages or Developmental Periods. NAEYC-NAECS/SDE's position statement suggests that determining how to link expectations in early learning standards to particular age ranges or developmental levels is particularly challenging. For instance, the position statement says, "when a standard is written to cover a wide age spectrum . . . adults may assume that the youngest children should be accomplishing the same things as the oldest children, leading to frustration for both the youngest children and for their teachers." Conversely, the statement continues, "with such broad age ranges for standards, adults may also underestimate the capacities of older children" (NAEYC & NAECS/SDE, 2002).

States appear to have addressed this challenge of determining what age range to include in early learning standards in a variety of ways. Table 4 shows the age ranges addressed in the state early learning standards published at the time of the interviews. Twenty-four states addressed an age range for 3- to 5-year-olds, with some (like Florida) describing distinct expectations for 3-year-olds, 4-year-olds, and 5-year-olds. Others (like Minnesota and Mississippi) have developed standards they consider to be for children who are 4 years old. And other states (like Missouri and Oklahoma) have developed standards that address a particular point in time/age such as the end of pre-kindergarten or the beginning of

kindergarten.

Table 4
Ages Covered by Early Learning Standards

State	Infant/ Toddler	3–5	End of Pre-K/ Kindergarten Entry	Comments
Arkansas		X		
California	X	X	X	Are part of continuum of birth through 14 years
Colorado		X		
Connecticut		X		
Florida		X	X	Pre-K and K, with ages broken down (i.e., 3-year-olds, 4-year-olds, and 5-year-olds)
Georgia		X		
Illinois		X		
Louisiana		X		All 4-year-olds and 3- to 5-year-olds with disabilities
Maine Learning Results Early Learning Results	 X	 X X	 X	 Pre-K to 2 0–5 years for Special Ed.
Maryland			X	Part of pre-K to K Content Standards
Massachusetts		X	X	Part of pre-K to 12 grade (pre-K to 2 for most subject areas; pre-K to 4 for history and social science)
Michigan		X	X	Pre-K to second grade
Minnesota		X		Approximately 4 years old
Mississippi		X		4-year-olds
Missouri			X	
New Jersey		X		
New Mexico	X	X		Part of Focused Portfolios assessment system that covers birth through 5 years
New York		X		4-year-olds
Ohio		X		
Oklahoma			X	
				Pre-K to second grade but

Pennsylvania		X	X	"through pre-K" and pre-K to K" are broken out
Rhode Island			X	
South Carolina		X		Pre-K to second grade but have the pre-K separated out
Texas		X		
Utah		X		
Vermont		X	X	Pre-K to fourth grade
Washington ECEAP OSPI	X	X	X	Continuum of birth through 5 years (OSPI)
Total	**4**	**24**	**12**	

Accommodations for Community, Cultural, Linguistic, and Individual Differences. The position statement notes the importance of children's cultures, languages, and individual needs such as disabilities in their growth and development and suggests that "early learning standards should be flexible enough to encourage teachers and other professionals to embed culturally and individually relevant experiences in the curriculum, creating adaptations that promote success for all children." Data from the study indicate that accommodations for individual differences are valued but that specific adaptations have not been addressed in many states. Each of the respondents indicated that his or her state's early learning standards were designed to apply to all children, including children from diverse cultural and linguistic backgrounds, as well as children with disabilities.

Some states have worked to provide guidance on how to use early learning standards with children with disabilities. In California, an initiative has been funded to look specifically at how the Desired Results system can accommodate children with disabilities. Maine's Early Learning Results are designed for use in programs serving children with disabilities. However, when the standards documents were examined, relatively few addressed specific strategies on how children with disabilities should be included when the standards are implemented at the classroom level. Perhaps even more telling is the lack of guidance on how the early learning standards should be applied with children who are learning English. At the time that data were collected, Texas was the only state with specific guidance for accommodations that should be made for English-language learners. A few respondents spoke of plans to translate the standards into other languages, but at the time of the interviews, little guidance was provided to teachers or others using the standards as to how children's individual circumstances can or should be accommodated.

The Process for Developing Early Learning Standards

The position statement suggests that effective early learning standards are developed through a process that includes "appropriate expertise, stakeholder involvement, and regular evaluation and revision." Data from this study indicate that the early learning standards development process in most of the states has been consistent with these recommendations. As shown in Table 5, states included a wide range of stakeholders and individuals with various areas of experience and expertise. Although state departments of education were by far the agency most likely to have the lead in the standards development process (22 out of 27 states), they included representatives from local school districts, higher education, human service agencies, parents, and external consultants in the process. Furthermore, almost all respondents reported that their state had solicited public feedback on their draft documents through focus groups, public forums, mailings, and/or Web postings. The process for developing standards has, in most states, been highly inclusive.

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Table 5
Partners in the Standards Development Process

State	Local School Districts	Dept. of Social Services/ Human Services	Dept. of Special Education	Higher Education	Parents	External Consultants	Other
Arkansas	X		X	X		X	
California	X	X	X	X	X	X	Researchers Practitioners
Colorado	X	X	X	X	X		Business
Connecticut	X			X		X	
Florida	X	X	X	X		X	Library assoc./ Business
Georgia						X	Public health
Illinois	X			X	X		
Louisiana	X	X		X			
Maine Learning Results Early Learning Results	X X						Child dev service sites
Maryland	X			X		X	
Massachusetts	X						
Michigan	X	X	X	X	X		State reading assoc.
Minnesota	X		X	X	X		Community agencies
Mississippi	X	X		X			
Missouri	X	X			X		Literacy grant program/PAT
New Jersey	X	X		X	X		Advocacy groups/Lucent Tech.
New Mexico						X	
New York	X		X		X		
Ohio	X			X			Dir. of State's Literacy Init.
Oklahoma	X			X			
Pennsylvania	X		X				
Rhode Island	X	X	X	X	X		Dept. C.Y. &F

South Carolina	X	X					State Legislature
Texas	X					X	
Utah	X			X			
Vermont	X	X		X	X	X	Business
Washington ECEAP OSPI	X			X	X	X X	
Total	**26**	**11**	**9**	**18**	**11**	**11**	

Respondents also indicated that the persons developing the early learning standards for their states consulted a variety of resource materials. The most important resource used to develop the early learning standards was the state's own K-12 standards. Respondents from all 27 states indicated that their state had used the state's K-12 standards in some way when developing early learning standards. States developing early learning standards consulted a number of other resources, including developmental theories, national early childhood standards, National Education Goals Panel's dimensions of readiness, and Head Start's Performance Standards, as well as assessment tools and curricula. In short, the standards development process in most states was characterized by widespread stakeholder involvement and efforts to bring to bear the most relevant knowledge and expertise available.

Implementation and Assessment Practices

The relationship between early learning standards and assessments or other accountability tools is a significant issue. The NAEYC-NAECS/SDE position statement suggests that effective standards must be linked to effective curriculum and classroom practices and that the relationship between assessments and standards must be evident. Data from this survey suggest that plans for implementation of the standards are still underway and that, in many cases, the relationships among standards, assessments, and curricula are not clear.

Intended Uses of Early Learning Standards. First, it is important to gain an understanding of how the standards were intended to be used, where they are intended to be used, and the degree to which programs are being held accountable for using the early learning standards. Table 6 shows that early learning standards were developed for many different purposes. Respondents from each of the states indicated that one of the purposes of the early learning standards was to improve curriculum and instruction. The hope was that by articulating expectations for children's growth and learning, teachers would focus their curriculum on significant learning experiences to support the skills and characteristics described in the standards. Respondents also indicated that their states intended for the standards to improve informal classroom assessments (14), improve the skills and abilities with which children enter school (13), and improve the general quality of early childhood programs (11).

Table 6
Intended Purposes of Early Learning Standards

	Intended Purposes			
State	**Inform Curriculum and Instruction**	**Improve Program Quality**	**Improve School Readiness**	**Provide a Basis for Instructional Assessments**
Arkansas	X	X	X	X

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California	X	X	X	X
Colorado	X		X	
Connecticut	X	X		
Florida	X		X	
Georgia	X	X		
Illinois	X			
Louisiana	X	X		X
Maine Learning Results Early Learning Results	 X X		 X	 X
Maryland	X			
Massachusetts	X	X		
Michigan	X	X	X	
Minnesota	X			X
Mississippi	X			
Missouri	X		X	X
New Jersey	X	X	X	
New Mexico	X			X
New York	X		X	
Ohio	X	X		
Oklahoma	X			X
Pennsylvania	X		X	X
Rhode Island	X	X	X	X
South Carolina	X			X
Texas	X		X	
Utah	X			
Vermont	X			X
Washington ECEAP OSPI	 X X	 X	 X	 X X
Total	**29**	**11**	**13**	**14**

Typically, the early learning standards were developed for a specific program. Twenty-two of the 29 sets of standards were for the states' publicly funded early care and education programs, which in most cases are the states' publicly funded pre-kindergarten programs or school readiness programs (typically located, at least in part, in public schools). Even though the standards were developed for specific programs, almost all of the respondents indicated that their states are making the standards available to other programs with the hopes that they, too, would use them. States varied as to the degree to which they required programs to actually use the early learning standards. Descriptions of the standards ranged from "mandatory," to "required," to "suggested," to "expected." Only eight—Connecticut, Minnesota, Missouri,

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Oklahoma, Rhode Island, Texas, Utah, and Washington—were reported as voluntary.

Assessment and Data Collection Related to Early Learning Standards. States also varied as to the type of data they plan to collect on programs' use of the early learning standards. Two states—Illinois and Louisiana—plan to collect data on the extent to which programs use the standards in their curriculum planning. These states are developing systems to monitor how the standards are incorporated into planning and daily activities or lesson plans.

Other states are planning to collect data on children's progress toward meeting the expectations outlined in the early learning standards. This type of program accountability, as it is commonly understood, means that programs or schools are held accountable not only for implementing standards but also for children's performance outcomes. In four states—California, Maine (Early Learning Results), New Mexico, and Washington (ECEAP)—the early learning standards are the basis for a data collection system, and programs are, therefore, going to be evaluated in some way based on the performance of children within their programs. Although none of these states had implemented their accountability systems at the time of the interview, respondents from each of these states indicated that at some time in the future, programs would be held responsible for child assessment data that indicate whether children have made progress on the standards.

In other states, the relationship between the early learning standards and child assessment data is less clear. For example, four states—Florida, Georgia, Michigan, and Ohio—have early learning standards and also have child assessment systems. Data from the interviews and from examining the early learning standards document indicate that the standards and the assessments may not be directly aligned. The standards and the assessment systems may address similar areas of children's development, but a more in-depth analysis would be necessary to determine the degree to which they are aligned. However, from our survey data, the assessment systems were not an integral part of the standards development process. Respondents from these and other states indicated that they did think that assessment systems tied to the early learning standards are a possibility for the future. Respondents in 19 states indicated that programs are not currently held accountable for the standards; 11 of these respondents indicated that they anticipate that such a system is at least a possibility in the future.

The Use of Standards and Assessments to Benefit Children. A chief concern among early childhood professionals, policy makers, and parents is the potential impact of such systems on individual children. The NAEYC-NAECS/SDE position statement identifies the most significant risk of any standards movement as the possibility of placing the responsibility for meeting standards on "children's shoulders rather than on the shoulders of those who should provide opportunities and supports for learning." Standards, and the assessments that accompany them, should benefit children rather than be used to label children as failures, keep them from advancing into the next level of education, or deny educational services.

Data from the survey indicate that states have been highly cognizant of the potential for negative consequences for individual children as they have developed standards. No respondent reported that his or her state had plans for holding children accountable for meeting the expectations articulated in the early learning standards or using assessment data in such a manner. In fact, a number of the standards documents contained language that specifically indicated that such use was NOT a purpose of the standards. For instance, the Washington Office of the Superintendent of Public Instruction (OSPI) document states, "These learning frameworks are not intended for use as a group of individual screening tools to place children in programs or to make determinations of readiness for school. They are not intended to be used as an assessment checklist nor as an evaluation tool to make high-stakes decisions about children's program placements" (OSPI, 2000, p. ii). Rhode Island early learning standards state that the document "SHOULD NOT be used to: assess the competence of young children; mandate specific teaching practices or materials; determine rewards or penalties for educational personnel; prohibit children from entering kindergarten; or exclude groups of children because of disabilities or home language" (Rhode Island Department of Education, 2002, p. 3). Clearly, the potential for negative consequences for children has been taken into account during the standards development process.

Support for Early Childhood Programs, Professionals, and Families

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We turn now to the final feature of effective standards addressed in the position statement—support for programs, professionals, and families as they interpret and implement the early learning standards. NAEYC and the NAECS/SDE suggest that standards can be used effectively only within the context of programs that have the support needed to provide high-quality services and access to professional development related to implementation of standards, and that include parents as key partners in helping children develop the skills and characteristics outlined in early learning standards.

Data from our study indicate that the resources allocated to the development of the standards have outpaced the resources allocated to implementation of the standards. Table 7 shows that the standards documents are being disseminated widely, most commonly through mailings and often by posting them on a Web site. In some states, thousands of copies of the document have been disseminated.

Table 7
Dissemination Strategies for Early Learning Standards

State	Mass Mailing	Mail by Request	Posted on the Web	Video
Arkansas		X		
California		X	X	X
Colorado			X	
Connecticut	X	X		
Florida		X	X	
Georgia		X	X	
Illinois		X	X	X
Louisiana	X	X	X	
Maine		X		
Maryland		X		
Massachusetts Learning Results Early Learning Results		 X X		
Michigan	X	X		
Minnesota	X	X	X	
Mississippi		X	X	X
Missouri	X	X	X	
New Jersey		X	X	
New Mexico		X		
New York		X	X	
Ohio		X	X	
Oklahoma		X	X	
Pennsylvania			X	
Rhode Island		X		
South Carolina	X	X	X	
Texas	X	X	X	

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Utah		X	X	X
Vermont		X		
Washington ECEAP OSPI		 X X	 X X	
Total	**7**	**27**	**19**	**4**

However, when asked about the training and support provided for programs implementing the standards, respondents typically described relatively short-term efforts, such as conference presentations or workshops. For example, in Connecticut, the Bureau of Early Childhood Education models the standards in workshops and seminars for different constituencies. Minnesota provides 12 one-day regional workshops throughout the year on their standards. Likewise, Mississippi provides frequent trainings and workshops on the early learning standards. Both New Jersey and Ohio report that training on how to use or implement early learning standards is incorporated into regular professional development opportunities provided throughout the year. Data from this study do not allow us to compare the number of persons who have received the standards documents with the number who have received some form of training. Only Colorado reported that the state provides copies of the standards documents only to persons trained by a trainer who has completed an approved training on the standards.

Some states have used different approaches to provide training and professional development to support the use of the standards. Respondents from Arkansas, Connecticut, Michigan, and New Jersey mentioned that teacher education programs in their states are incorporating the state's early learning standards into their courses to promote understanding of the standards. In Arkansas, early childhood education students at the University of Arkansas in Fayetteville study the standards as part of their teacher preparation courses. In Connecticut and Michigan, preschool education programs in the college and university system use the standards as part of their courses. States have made efforts to infuse their standards into teacher preparation programs as a means of reaching a wider audience. Connecticut has also established model centers to demonstrate how standards can be used in practice.

Ongoing technical assistance was provided by a number of the states. The methods of technical assistance most commonly reported were phone support and mentor teachers. State specialists receive phone calls from programs and individuals with specific questions about the standards and provide individualized assistance via telephone. In Rhode Island, Resource and Referral centers train mentor teachers to provide support and professional development to teachers in the pilot programs that are using the standards. New Mexico also utilizes the state's Resource and Referral agencies to provide training on the standards, although the training is provided directly to program staff rather then through mentor teachers. Clearly, the type of support needed to fully implement a standards-based care and education system will require additional supports for programs, personnel, and families.

Summary and Recommendations

Using the NAEYC-NAECS/SDE position statement as a framework for examining states' efforts to develop and use early learning standards provides a useful analysis of where our country is and what is needed to maximize the potential benefit of early learning standards. Almost 40 states have or are developing early learning standards. Clearly, this issue is significant for the field and warrants attention and careful consideration. Data from this analysis suggest that states have incorporated a number of the features of effective early learning standards identified by NAEYC-NAECS/SDE.

In terms of content, our data show that states have typically addressed multiple domains of children's development in their standards, although approaches to learning and social-emotional development are more likely not to be addressed. The standards are linked to K-12 standards, although the manner in which they are linked varies. States have varied in how they have approached the age range addressed, with most

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states outlining relatively broad expectations over the period of 3 to 5 years of age. Relatively few specifics have been provided on how children from various cultures, children who speak languages other than English, and children with disabilities are to be accommodated when standards are implemented.

The development process in most states seems to reflect the recommendations of the joint position statement. Typically, states have included numerous stakeholders in the development process, have relied on a variety of resource materials and experts in the field, and have provided multiple opportunities for discussion and feedback among stakeholders. Furthermore, a number of states are in the process of reviewing/revising their standards, although these review processes seem to be more a reaction to specific developments within the state than the result of a systematic plan for regular review and updating of the standards.

Concerns regarding the ethical and beneficial use of standards and assessments seem to have been addressed. No respondent indicated that his or her state plans to use standards or standards-related assessments to make decisions about individual children. Further work appears to be needed to examine the degree to which assessments being used are aligned or related to the standards. Ideally, standards articulate what children should learn; curriculum dictates how they will learn what is called for in the standards; and assessments collect data related to how well the standards and curriculum have been implemented. However, at this point, the relationship among standards, curricula, and assessments in many states appears to be left to happenstance, and the relationship among these three elements is, for all practical purposes, not addressed in most states.

Finally, additional supports will be needed for the early learning standards to be implemented effectively. As the position statement points out, significant investments in the quality of programs and professional development for staff will be necessary to fully implement the standards. Data from this study indicate that efforts to develop the standards have outpaced support for implementation, and much work needs to be done in this area.

Based on this analysis using the NAEYC-NAECS/SDE position statement as a framework, we provide the following recommendations:

- States consider the importance of including all developmental domains in their early learning standards and work toward including domains that may not currently be addressed, particularly social-emotional and approaches toward learning.
- States devote significant resources to studying the relationship between universal standards and unique needs of limited numbers of young children. A national task force or other group should be convened to address the content and application of standards for children with disabilities and English-language learners, in particular, with the goal of advancing the expectations and learning outcomes for all children.
- States continue the practice of using a broad-based and inclusive process for developing standards and give continued attention to the research base used to develop the standards. States should also develop a systematic approach to reviewing and revising standards that are currently in place to ensure that they reflect the most up-to-date research and practice in early care and education.
- States provide a forum and funds for more systematic evaluation of the implementation and use of standards across the nation, with a specific focus on linkages among standards, assessments, and curriculum. Funding is needed for empirical studies that examine the use of standards and the nature of changes in child outcomes.
- States provide ongoing and substantial support to frontline staff as they implement standards in the form of mentoring, workshops, and preservice and inservice training to ensure that the standards are clearly understood and can be implemented effectively and to ensure that standards are linked appropriately to assessment and curriculum. This support should include the importance of effective communication of standards to parents.

Finally, we need to carefully examine our purposes for developing early learning standards and the opportunities they bring for promoting dialogue across settings and strengthening the early care and education system. Careful articulation of early learning standards can provide a common vision and a common nomenclature to unite various types of early care and education programs. However,

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implementation of standards in some programs but not others could potentially even further divide our already fragmented "nonsystem," with some programs being held responsible for child outcomes and others not. Given that we want success for all children, unevenness of standards across programs is not helpful. Likewise, the development of early learning standards provides an opportunity to further the dialogue with representatives from the K-12 system and establish more clearly the important role of early care and education in children's success later in school. We see the development of early learning standards as an opportunity to work toward a more integrated education system, both within early care and education providers and between early care and education and the K-12 system. Careful consideration and open dialogues, along with massive support for implementation of the standards, will be necessary for the field to realize the potential benefits of early learning standards and minimize the potential negative consequences.

Notes

*The authors have used the 2002 joint position statement on early learning standards developed by the National Association for the Education of Young Children and the National Association of Early Childhood Specialists in State Departments of Education as a framework for analyzing data and discussing findings from a national study on early learning standards. The use of the position statement in no way reflects endorsement or involvement of either of the two organizations in the study. The findings reported and the corresponding recommendations are those of the researchers who conducted the study and have not been reviewed or endorsed by the National Association for the Education of Young Children nor the National Association of Early Childhood Specialists in State Departments of Education.

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References

American Federation of Teachers. (1999). *Making standards matter*. Washington, DC: Author. ED 436 607.

Bogdan, Robert C., & Biklen, Sari K. (1998). *Qualitative research for education: An introduction to theory and methods*. Boston: Allyn & Bacon. ED 419 813.

Bowman, Barbara T.; Donovan, M. Suzanne; & Burns, M. Susan (Eds.). (2001). *Eager to learn: Educating our preschoolers*. Washington, DC: National Academy Press. ED 447 963.

Bredekamp, Sue, & Copple, Carol (Eds.). (1997). *Developmentally appropriate practice in early childhood programs serving children from birth through age 8* (Rev. ed.). Washington, DC: National Association for the Education of Young Children. ED 403 023.

Campbell, Frances A., & Ramey, Craig T. (1994). Effects of early intervention on intellectual and academic achievement: A follow-up study of children from low-income families. *Child Development, 65* (2), 684-698. EJ 483 939.

Campbell, Frances A., & Ramey, Craig T. (1995). Cognitive and school outcomes for high risk African-American students in middle adolescence: Positive effects of early intervention. *American Educational Research Journal, 32*(4), 743-772. EJ 520 956.

BEST COPY AVAILABLE

Cost, Quality, and Outcomes Study Team. (1995). *Cost, quality, and child outcomes in child care centers: Public report* (2nd ed.). Denver: University of Colorado. ED 386 297.

Doherty, Kathryn M. (2002). Early learning. Quality counts 2002: Building blocks for success. *Education Week, 21*(17), 54-56.

Kagan, Sharon L.; Moore, Evelyn; & Bredekamp, Sue (Eds.). (1995). *Reconsidering children's early development and learning: Toward common views and vocabulary*. Report of the National Education Goals Panel, Goal 1 Technical Planning Group. Washington, DC: U.S. Government Printing Office. ED 391 576.

Lay-Dopyera, Margaret, & Dopyera, John. (1990). The child centered curriculum. In Carol Seefeldt (Ed.), *Continuing issues in early childhood education* (pp. 207-222). Columbus, OH: Merrill.

Mid-continent Research for Education and Learning (McREL). (2003). *Content knowledge* (3rd ed.) [Online]. Available: http://www.mcrel.org/standards-benchmarks/docs/purpose.asp [2003, August 8].

National Association for the Education of Young Children (NAEYC) & National Association of Early Childhood Specialists in State Departments of Education (NAECS/SDE). (2002). *Early learning standards: Creating the conditions for success* [Online]. Available: http://ericps.crc.uiuc.edu/naecs/position/creating_conditions.pdf [2003, September 3].

National Institute of Child Health and Human Development. (2001). *The NICHD study of early child care* [Online]. Available: http://www.nichd.nih.gov/od/secc/index.htm [2003, September 3].

Office of the Superintendent of Public Instruction. (2000). *A framework for achieving the essential academic learning requirements in reading, writing, communication. Birth to 5 years.* Olympia, WA: Author.

Peisner-Feinberg, Ellen S.; Burchinal, Margaret R.; Clifford, Richard M.; Culkin, Mary L.; Howes, Carollee; Kagan, Sharon L.; Yazejian, Noreen; Byler, Patricia; Rustici, Jean; & Zelazo, Janice. (1999). *Children of the cost, quality, and outcomes study go to school. Executive Summary*. Chapel Hill: University of North Carolina, Chapel Hill. (Also available: http://www.fpg.unc.edu/ncedl/PDFs/CQO-es.pdf) [2003, September 3].

Ravitch, Diane. (1995). *National standards in American education: A citizen's guide*. Washington, DC: Brookings Institution. ED 400 617.

Rhode Island Department of Education. (2002). *Rhode Island early learning standards: Final draft.* Providence, RI: Author.

Schulman, Karen; Blank, Helen; & Ewen, Danielle. (1999). *Seeds of success*. Washington, DC: Children's Defense Fund. ED 435 461.

Schweinhart, Lawrence J. (1988). How important is child-initiated activity? *Principal, 67*(5), 6-10. EJ 372 010.

Schweinhart, Lawrence J.; Barnes, H. V.; & Weikart, David P. (1993). *Significant benefits: The High/Scope Perry Preschool study through age 27* (Monographs of the High/Scope Educational Research Foundation No. 10). Ypsilanti, MI: High/Scope Educational Research Foundation. ED 366 433.

Shepard, Lorrie; Kagan, Sharon L.; & Wurtz, Emily (Eds.). (1998). *Principles and recommendations for early childhood assessments*. Washington, DC: National Education Goals Panel.

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Supporting Vulnerable Learners in the Primary Grades: Strategies to Prevent Early School Failure

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Abstract

This article provides early elementary school teachers with specific strategies to support the diverse needs of children who are vulnerable for failure in school. Children who are vulnerable include those who have an increased risk for failure because of specific characteristics that have been found to predict problems in school, such as poverty. A theoretical framework is provided to illustrate the multiple and interactive influences affecting children who are vulnerable. Specific strategies for establishing relationships, addressing the needs of children who exhibit challenging behavior, and supporting language development are discussed.

Introduction

Young children enter elementary school with many different needs, skill levels, and learning histories (e.g., Kauffman, 2001; Meese, 2001; Mercer & Mercer, 2001). In addition to the challenge of meeting the typical needs of a group of young children who are at different developmental and skill levels, teachers also need to be prepared to work with young children who are at risk for failure in school (Kaiser & Hester, 1997; Carnegie Task Force on Meeting the Needs of Young Children, 1994). A growing population of children are vulnerable for failure in their early years (Erikson & Pianta, 1989; Carnegie Task Force on Meeting the Needs of Young Children, 1994; Walker, 1998; Webster-Stratton, 1997). For the purposes of this article, we have defined children who are vulnerable as those who have an increased risk for academic or social problems given the presence of specific conditions or demographic characteristics that predict future problems. Although the presence of disabilities often creates greater risk for academic and social problems, the focus of this article will be on learners who are at risk but do not have identified developmental delays or disabilities.

Most children are "at risk" at some time or another. James Comer states that "given increasing divorce rates, the growing numbers of single parent families and families in which both parents work, and the general complexity of modern life, even children of well-educated, middle-class parents can come to school unprepared because of the stress their families are undergoing" (as cited in Ascher, 1993, p. 2).

Some of these children will require social or educational intervention and support in order to succeed in school. Accordingly, this article provides teachers with research-based classroom strategies to support learners with a wide range of needs. Prior to the discussion of educational supports, information on the contexts that create vulnerability in learners is presented.

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Children Who Are Vulnerable for Failure

Many children who are considered "vulnerable" live below the poverty level. Poverty has been documented repeatedly as a risk factor; the developmental and achievement deficits in children from low socioeconomic backgrounds are significant by kindergarten entry and increase with each year in school (West, Denton, & Germino-Hausken, 2000). It is also important to underscore the fact that children with certain ethnic or language backgrounds are at greater risk for poverty, including children of African American and Hispanic descent, children whose first language is not English or who speak a nonstandard dialect of English, and children who have limited language skills. Currently, African American and Hispanic students account for 34% of the public school population (National Center for Education Statistics, 2002).

Multiple risk factors can clearly create greater vulnerability in children. For example, Hispanic children, and particularly those children whose first language is not English, are about twice as likely as non-Hispanic White children to read below average for their grade (Kao & Tienda, 1995). The increased risk for failure for Hispanic students is important to underscore given that Hispanic students account for at least 17% of the public school population, and in some areas of the United States, Hispanic students account for up to 32% of the public school population (National Center for Education Statistics, 2002).

In addition to children who are at risk because of poverty and poorly developed or nonstandard English-language skills, children may also be considered vulnerable because of their behavior. Children who enter kindergarten with high levels of activity and aggression appear to be at greatest risk for having negative social outcomes (Stormont, 2002). Peers tend to reject children who exhibit behavior problems, and after a period of time, children who exhibit behavior problems may be on the receiving end of unprovoked aggression from peers (Olson, 1992). Thus, as reputations are created, even in the preschool years, it becomes a challenge to create interventions that change behavior in socially valid ways (i.e., peers and adults acknowledge improvement). As children continue to manifest challenging behavior over time, the task of changing their behavior becomes very difficult. According to Walker, Colvin, and Ramsey (1995), if antisocial behavior patterns are not remedied prior to the fourth grade, the behavior patterns are thought to be so established that they cannot be "cured" but can only be managed with ongoing supports and interventions.

Other research has also clearly underscored the importance of this window of opportunity for affecting children's adjustment. Pianta (1999) states "by the end of third grade, children's pathways are fairly set. By the end of third grade, one can predict with a fairly high degree of accuracy how well children will do in their later years" (p. 16). Thus, the importance of providing supportive early elementary school experiences that build skills and competencies in young children who are vulnerable for having social and academic problems cannot be overstated (Walker, 1998).

Therefore, one of the ongoing challenges for researchers and teacher educators is to provide teachers in early elementary school classrooms (i.e., kindergarten through third grade) with specific strategies to meet successfully the academic and social needs of a diverse group of young children. To better understand the dynamic interaction of layered influences, it is important to provide a theoretical model to use as a framework for understanding vulnerability. We have selected a systems theory to frame the discussion of children who are vulnerable in early educational settings.

Systems Theory

According to Pianta (1999), systems theory is useful for understanding risk factors and the ways in which teachers can buffer or exacerbate children's risk. Systems theory also addresses the complexity of risk factors, the interrelationship among risk factors, and the effects of these conditions on children's development and learning. When applying systems theory to the classroom context, it is important to understand how different system levels can influence classrooms. Pianta (1999) described a multilevel systems theory for understanding children's development and learning within the context of four different

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system levels. The most distal level includes the culture and community within the specific systems of school, neighborhood, and church. The next two levels include the smaller social groups, which encompass the classroom, peers, and family systems, and the dyadic systems, which encompass teacher, friend, and parent interactions with the child. The final system level is the individual child's biological and behavioral systems. All of these levels are interactive and affect each other in various idiosyncratic ways.

Although most of the specific systems that affect children are addressed in this article in some fashion, the greatest emphasis will be on the classroom, small group, dyadic, and child systems. We chose this focus because of the premise that although the other systems affect the teacher and the student, both directly and indirectly, the teacher may not be able to impact them significantly. However, many systems exist within the classroom that the teacher can impact greatly, including small group interactions, interactions with peers and friends, and, perhaps most importantly, teacher-student interactions. Through positive interactions with children, teachers can teach important competencies that may protect children from developing or sustaining problems (Pianta, 1999). This article is timely given the prevalent societal practice of interpreting vulnerable children's biological systems as the cause of their behavior and ignoring the influence of other systems. "The ease with which biological interpretations are made for children's school-related problems (e.g., reading failure, behavior maladaptation) reflects an unfortunate inclination to attribute the cause of problem outcomes in schools to forces that schools cannot influence or control..." (Pianta, 1999, p. 32).

In this article, we first describe general supports that children need to have within their classrooms. Supports for fostering positive classroom relationships and appropriate behavior are important for all young children, including those who are vulnerable for failure. Within the context of these broader supports, young children who are vulnerable also need teachers who can implement strategies to address behavioral concerns and can foster the development of language abilities.

Supporting Social Development

Classroom Relationships

Classroom relationships can be powerful influences in all children's lives, and as noted earlier, teachers can influence these relationships greatly (Pianta, 1999). Building on Roberts (1996), Pianta argues that this approach can be especially important for children living in high-risk circumstances for whom relationships may be compromised. He further states that

> because adult-child relationships are a resource for development, strengthening these relationships in nonrisk populations can have added benefits to development. In both risk and nonrisk samples, then, a focus on enhancing child-teacher relationships can be expected to elevate competence levels and to help attenuate the rates of failure currently present in public schools. (Pianta, 1999, p. 12)

Dalton and Watson (1997) also note the benefits of supportive classroom relationships. Their research with the Child Development Project in elementary schools indicates that children who perceive that their schools and classrooms have a strong sense of community and that their schools and classrooms are where their teachers and classmates care about them and where their ideas and concerns are considered important are more likely to "like school, trust and respect their teachers, enjoy challenging learning activities, be concerned about and help others, and resolve conflicts fairly and without force" (p. 164). Further, "the relationships between school community and student outcomes—particularly attitudinal and motivational outcomes—hold for schools at a wide range of poverty levels and, in some cases, appear to be strongest among schools with the most disadvantaged student populations" (Battistich, Solomon, Kim, Watson, & Schaps, 1995, p. 649).

Dalton and Watson (1997) describe many ways that teachers can foster caring relationships with and among children. Some of these strategies include (1) activities that help children get to know each other and their teacher as individuals (e.g., interviewing each other about favorite activities and special talents,

bringing special family possessions to school to show the class, making a class book and photo album that feature each child and the teacher along with information about each); (2) class meetings in which children describe "ways we want our class to be" (Developmental Studies Center, 1996) and then collaborate to establish class norms in accordance with those ideas; and (3) collaborative learning environments where it is safe to make mistakes and everyone has a way to participate. One teacher in the Child Development Project explained, "When everyone counts, everyone can contribute; when everyone can contribute, everyone can learn" (Dalton & Watson, 1997, p. 16).

Even after relationships and a sense of community have been built within a classroom, some children may require additional support. Children who are considered vulnerable because of their behavior often have high levels of activity and impulsivity, attention problems, aggressive behavior, or problems regulating their emotions. Many children who exhibit challenging behavior are from families who experience multiple stressors, and these children may not have learned appropriate ways of solving conflicts or expressing their needs (Kauffman, 2001; Stormont, 2001). The following section provides teachers with some concrete strategies for supporting children who exhibit challenging behavior.

Supporting Children Who Exhibit Challenging Behavior

Although all young children benefit from behavior supports such as clear expectations, direct teaching of appropriate behavior, and positive interactions with teachers, children who are vulnerable because of their challenging behavior usually need more support in these areas. In addition, children who are vulnerable may need other more individualized supports. These supports are discussed in the following sections.

Teach Expectations. At the beginning of the school year, elementary school teachers commonly introduce, or develop with their students, the rules or expectations for their classroom (Meese, 2001). Reviewing the rules during the first days or weeks of school will often be enough for children who have had similar behavior expectations stressed in other environments. However, for some children, learning acceptable classroom behavior will take a lot of time and practice (Lewis & Sugai, 1999). Children who are vulnerable for challenging behavior will need multiple opportunities to learn the rules and may take longer to learn how to behave appropriately in different settings. It is important that teachers understand the different experiences that some children have had in terms of behavior expectations (Lewis & Sugai, 1999). As Van Acker, Grant, and Henry (1996) note:

> The behaviors and values that children learn at home and in their community are brought with them as they enter school. For many of these children the behaviors that are perceived as inappropriate in the school setting are learned and/or sanctioned in the child's home. (p. 317)

In other cases, children have families who have taught and tried to support appropriate behavior, but because of the children's unique characteristics (e.g., high activity, attention problems), these children need additional support in the school setting.

Without understanding how different contexts affect children's behavior, teachers may develop a negative attitude toward children who exhibit challenging behavior (Kauffman, 2001). As noted above, children at risk for challenging behavior need to be taught explicitly what they are expected to do to meet their needs without jeopardizing the needs of others in the class or school. One way teachers can accomplish this goal is to give concrete and specific feedback to children (Lewis & Sugai, 1999). For example, teachers may point out to a child when he behaved kindly to a peer or adult. Conversely, if a child was not kind, teachers may first explain to her that what she did was not kind in very specific terms and then help her say what she wants to say in an appropriate way. Young children who are vulnerable for behavior problems may not have the language skills necessary to negotiate their needs with peers. When these children hear "use your words," they may think that they are using their words. Teachers need to support children in learning new words and new ways to negotiate their needs and desires. Teaching appropriate social behavior requires at least as much patience as teaching academic concepts (Sugai & Lewis, 1996). If children make an academic error (e.g., child says "ten-teen" instead of "twenty"), teachers use that information to assess what a child understands about specific content. If a child makes a social error (e.g., he calls a child a name when she interrupts his activity), teachers must also use this behavior as a piece of

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information to target the child's needs for instruction in this area (Sugai & Lewis, 1996).

Monitor Interactions. Teachers can easily become frustrated with the amount of time they spend managing the behavior of a few students. They may also find themselves feeling that they are constantly negative or critical with some children who exhibit challenging behavior. For these few children, it is important that teachers monitor the feedback that they are giving to them (Lewis & Sugai, 1999). For example, do children only get teacher attention and assistance when they are off-task or breaking a rule? Furthermore, is that attention negative? Jack and colleagues (1996) found that children who exhibit challenging behavior had four times as many negative interactions with teachers as positive. Teachers need to collect data on how often they are providing positive feedback to the students they find most challenging.

Feedback could be monitored on an index card that the teacher keeps in his or her pocket or desk (i.e., where numbers of negative, corrective, and positive comments are tallied). If teachers find that they are not giving many positive comments to a few students, they could plan specific times to check whether students are acting appropriately and then provide positive feedback to each student (Gunter & Coutinho, 1997; Maag, 2001). The feedback should highlight for students what they are doing that is appropriate and helpful for their overall learning or social relationships. Teachers spend an incredible amount of time managing the behavior of a small number of students (Kauffman, 2001). It is important to use this time to support appropriate behavior proactively rather than spending time reacting to inappropriate behavior and perhaps contributing to a pattern of negative behavior (Gunter & Coutinho, 1997; Lewis & Sugai, 1999; Maag, 2001; Kauffman, 2001; Sugai & Lewis, 1996).

Target Individual Needs for Extra Support. When high rates of negative or corrective feedback are given to a few students, teachers should help support those students by providing more individualized supports for appropriate behavior. If a student tends to have problems consistently in certain contexts, then the teacher needs to support the child by restating the expectations for that setting immediately before the student enters it (Walker, Colvin, & Ramsey, 1995). Peers can also support other children by sharing game rules and other directions for activities prior to beginning. This support is particularly important for students who are impulsive and have problems creating organizational structures to approach play with peers (Stormont, 2002).

Settings that include large groups of children and minimal adult supervision are often associated with problem behavior in children (Sugai & Lewis, 1996). Additional strategies may need to be implemented in these settings because they may serve as triggers for problem behavior (e.g., playing tetherball, entering and exiting the lunch line, lining up and waiting for the bus [Lewis, Powers, Kelk, & Newcomer, 2002, Meese, 2001; Mercer & Mercer, 2001]).

For some children, visual cues may help them remember or conceptualize behavioral skills that are required in the school setting. Students could help create pictures that illustrate what desired behavior looks like in different settings. Teachers could also take pictures of students in the class when they are exhibiting behaviors with which a few children struggle (e.g., sharing, respecting others' activities, keeping hands to self, talking out problems) and refer to the pictures prior to entering different settings where those behaviors should be present. Students who are vulnerable may need such structure and visual cues to help them be more successful (Mercer & Mercer, 2001). Children's challenging behavior is also related to the how closely the task that they are expected to complete matches their abilities. Gunter and Coutinho (1997) found that when children were provided with instructional modifications or enough information to be successful when completing tasks, their disruptive behavior decreased.

Some students may also need more focused instruction on specific social skills. Young children who are vulnerable may have some common social skills deficits, including, for example, using aggression to resolve conflict. Children who use aggression when they are angry need strategies for regulating their anger in more socially appropriate ways. For example, children can be taught to ask to talk with a particular person when they are upset. Children can also provide teachers with a signal that indicates that they are getting upset and need help coming up with appropriate ways to deal with a conflict. Children become angry for a variety of reasons. Some children may get frustrated when they cannot put together a puzzle or figure out what they are supposed to do to complete an assignment. For children who need more

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concrete directions or assistance completing tasks, teachers might assign these students a few peer buddies who could help the student when he or she needs assistance. Teachers could educate the peer buddies on how to work with the student, including ways to communicate clearly and how to help the student complete a task without completing it for him or her.

Other children become angry when they are given instructions to do something that they do not want to do. Whether the direction is to be seated or to come in from recess, some children have trouble complying immediately with a teacher's requests (Olympia, Heathfield, Jenson, & Clark, 2002). Teachers need to support these students by providing prompts for transitions and perhaps helping students plan for what they will do when they go to the other setting. For example, a teacher might say, "Sami, we are going in from recess in 5 minutes. Do you know what we are going to do when we get inside?" Sami might say, "You are going to read to us. Can I draw while you are reading?" This conversation and opportunity to honor a child's preference (drawing) may ease the transition from recess. Another way teachers can work with students who do not like to comply with directions is to offer as many choices within tasks as possible. These choices need to be structured. For example, choosing not to complete assigned tasks is unacceptable. However, children could choose how they complete tasks or the order in which they complete them. Again, it is also important that teachers are consistent in enforcing their expectations while supporting children in negotiating how to get their personal needs met without disrupting others. Research clearly supports the need for such support (Eisenberg et al., 1999). Specifically, young children's reactions to anger in early elementary school were predictive of social competence several years later.

Many packaged social skills curricula are available that may be useful for particular groups of students who need to work on strategies for dealing with anger, asking for assistance, and other social behaviors. For example, one social skills curriculum is the Skillstreaming series (Goldstein, McGinnis, Sprafkin, Gershaw, & Klein, 2003; McGinnis & Goldstein, 2003). This curriculum includes a format that lists specific skills to be addressed and then provides corresponding lesson plans. However, lessons need to be modified and adapted to make the curriculum more meaningful to the students (Sugai & Lewis, 1996). Additionally, social skills should be taught throughout the day and supported by different people in the school environment. Overall, social skills instruction should focus on teaching children to respond to their environment in ways that are socially appropriate so that they develop more positive relationships with peers and adults and spend more time engaged in learning. For an extensive review of how social skills should be assessed and guidelines for social skills instruction, see Sugai and Lewis (1996).

Peers and other adults can be recruited to help support children's use of socially appropriate behavior in different contexts. One specific strategy that may be particularly appealing to teachers because it involves a classroom-wide commitment to supporting appropriate behavior is peer "tootling." Researchers have recently recommended teaching peer tootling to support peer recognition of appropriate behavior and to minimize adult attention for tattling behavior (Skinner, Neddenriep, Robinson, Ervin, & Jones, 2002). When implementing the tootling strategy, students record, on an index card taped to their desk, specific instances when they observe a peer helping another peer throughout the day. The teacher collects index cards at the end of each day, records the data, and shares the information with the students the following morning. Teachers add their own observations, so that, over a few days, all children are recognized for positive peer behavior.

The overall purpose of the strategy is to teach children to recognize when their peers are doing kind things. This experience can be especially poignant for students who are vulnerable and may receive only negative feedback from peers regarding their behavior. Teachers could modify this strategy and have class meetings at the end of the day during which the children share their comments regarding their peers. Again, teachers would add their own observations as necessary to be sure all children are recognized over time. Teachers could also have other adults such as the principal or another teacher come in and share their comments regarding observations of children's appropriate behavior.

Access Additional Support. For 3-5% of the school-age population, the support strategies delineated in article will not be enough to support them in the general education setting (Kauffman, 2001). Therefore, teachers need to collaborate with other professionals who have expertise in the area of challenging behavior. School psychologists and behavior consultants should have the expertise needed to conduct functional behavioral assessments of children who exhibit severe behavior problems. Functional

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behavioral assessments involve a detailed analysis of the environmental factors that may support a student's inappropriate behavior followed with an individualized plan to teach and support a more socially appropriate alternative behavior (e.g., Lewis & Sugai, 1999; Olympia, Heathfield, Jensen, & Clark, 2002).

For most students who are vulnerable, early supports for behavior can eliminate the need for more intrusive interventions. Early supports for academic difficulties are also important. Many children who exhibit challenging behavior also have skill deficits (Kauffman, 2001). Children who exhibit challenging behavior who have academic skill deficits may become disruptive to avoid difficult tasks. For many students who are vulnerable, some of their academic needs in school can be traced back to weak English-language skills. Accordingly, the following section describes strategies that teachers can use to support language development.

Supporting Language Development

Although most children who enter kindergarten are able to talk, school failure is often associated with language deficits. The negative effects of language delays and disorders on peer relationships (Rice, 1993), emotional and psychiatric disorders (Baker & Cantwell, 1982; 1987; Beitchman, Nair, Clegg, Ferguson, & Patel, 1986), behavior problems (Camarata, Hughes, & Ruhl, 1988), reading ability (Bashir & Scavuzzo, 1992), and later school achievement (Catts, 1993; Fey, Catts, & Larrivee, 1995; Watkins, 1994) have been well documented. As many as 17% of Americans are estimated to have some kind of communicative disorder (Owens, Metz, & Haas, 2000), and many more individuals have difficulties with communication that are not severe enough to be considered a disorder. The purpose of this section is to describe difficulties experienced by students who are vulnerable in the areas of language and some strategies to enhance the development of these children's skills.

Detecting language difficulties in early elementary school when children are able to talk can be challenging. Children struggling with language often have deficits in either auditory processing or in word retrieval. Frequently, teachers are concerned about the child's classroom behavior or low academic achievement and do not suspect that the child is having difficulty with language. Characteristics of children experiencing language difficulties may include difficulty following directions (may appear to be noncompliant), difficulty with phonics and hearing the differences among sounds, difficulty using either contextual or syntactic information for figuring out unknown text, difficulty in becoming or staying organized, difficulty with time management, difficulty with auditory comprehension, and difficulty getting along well with peers.

In general, children who have difficulty processing language need support from the environment to help make sense of the words they hear, particularly oral directions. The first strategy, adding visual or physical cues, can make the words more understandable and help the child remember what was being said. A second strategy is to ask for feedback or check for understanding. Often, children do not know that they do not understand, so asking, "Do you understand?" results in a nod of the head. Instead, teachers should ask the child a question that requires specific information. For example, "Tell me, what are you going to do first?" A third strategy is to avoid giving a list of directions at once. Often, the only direction the child will remember is the one heard last, which is not what teachers want done first. If it is necessary to give a series of directions, teachers can add written directions or pictures of the steps so the child has a concrete prompt.

In addition to those children who may have difficulty processing auditory input, children whose language in the home is not a good match to the language in the classroom may experience difficulty (Cook, Tessier, & Klein, 2000). School requires a language style that some families use as part of the familial communication style, and other families do not. Literate style language (i.e., school language) is more decontextualized than the type of language typically used among people who are familiar with each other. Many children need additional support to develop the vocabulary and narrative skills required for school success.

Vocabulary and narrative skills can be strengthened through reading to children and encouraging children

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to interact with both the teacher and the storybook. Research on the effects of interactive storybook reading with young children has shown that substantial gains can be made in oral language development, particularly for children from low-income environments who demonstrate language delays (Arnold & Whitehurst, 1998; Dickinson & Smith, 1994; Karweit & Wasik, 1996; Valdez-Menchaca & Whitehurst, 1992). Although interactive reading has been effective with kindergartners (Leung & Pikulski, 1990; Morrow, O'Connor, & Smith, 1990), as described below, it is not a common experience for many elementary-age children.

Storybook reading should be an interactive process, involving the child, the teacher, and the text. In addition to reading the text, adults should pose questions, comment on important features of the pictures or story, and respond to children's initiations about the words and pictures in the books (Arnold & Whitehurst, 1998; Cole & Maddox, 1997; Mautte, 1990). This kind of interaction requires a small adult:child ratio and is difficult to do effectively in a large group. Teachers can use the assistance of aides, paraprofessionals, parent volunteers, practicum students, and other professionals to help support storybook reading.

Storybooks as well as home and classroom activities can provide the context for children to construct their own narratives. Finding time in the day for children to tell those stories can be challenging, but doing so is important in developing narrative skills. In addition to the general language supports presented in this section, it is also important to address the needs of children who are vulnerable for failure who are learning English as a second language.

According to the U.S. Census Bureau (2000), 18% of all 5- to 17-year-old children live in families where English is not the primary language. In general, school experiences should support the continued development of the child's primary language while providing meaningful experiences with English (International Reading Association, 1997). Many classroom strategies can be used to support the development of the primary language. It is important to remember that the strategies used to support learning a first language are useful for supporting the acquisition of the second or even third language. These strategies include referential language, repetition, providing a rich context for the language, and beginning at the level where the child is able to understand. Children who are in the beginning stages of learning a language may listen for a long time before being willing to talk in class.

The development of both oral language and literacy in English can be supported in early childhood classrooms. Labeling objects and areas in the classroom using English and the other languages represented in the room can help students begin to make the connections between their home language and English. Storybooks can also be used to support language and literacy for children whose primary language is not English. Strategies include (1) adding the primary language translation to familiar stories, (2) sending translated books home, (3) establishing a lending library that includes books written in the children's primary languages, and (4) having fluent speakers of the child's primary language (instructional assistants, parent volunteers, older children) read and engage the child in early literacy activities in the primary language (Espinosa & Burns, in press). English-language development can be facilitated using the language strategies discussed above. It is important to remember that children will not learn literacy skills in a language they do not yet speak.

Summary

Many different factors place children in a vulnerable position upon entry into elementary school. The first purpose of this article was to provide professionals who work in early elementary school settings with information regarding risk factors that create such vulnerability in young learners. Because the interactions among different risk factors are also important to consider for each student, an interactive systems theory was used as a framework to discuss vulnerability. The second purpose of this article was provide professionals with some concrete strategies to support learners who are vulnerable. The foundational strategy is to establish personal relationships with and among students. Additional strategies for supporting children who exhibit challenging behavior and for supporting language development were also delineated.

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The importance of teachers being prepared to work with children who are vulnerable cannot be overstated. Success or failure in the first years of school greatly affects children's futures. If children leave third grade without good social skills and foundational language (and then subsequent reading) skills or have developed or sustained challenging behavior, their likelihood of having successful futures is bleak. Teachers need strategies such as the ones provided in this article to help create more successful educational futures in the lives of children who are vulnerable for failure.

Note

*In alphabetical order.

References

Arnold, David S., & Whitehurst, Grover J. (1998). Accelerating language development through picture book reading: A summary of dialogic reading and its effects. In David K. Dickinson (Ed.), *Bridges to literacy: Children, families, and schools* (pp. 103-128). Cambridge, MA: Blackwell.

Ascher, Carol. (1993). *Changing schools for urban students: The School Development Program, Accelerated Schools, and Success for All.* Trends and Issues No. 18. New York: ERIC Clearinghouse on Urban Education. ED 355 313.

Baker, Lorian, & Cantwell, Dennis P. (1982). Psychiatric disorder in children with different types of communication disorders. *Journal of Communication Disorders, 15*(2), 113-126.

Baker, Lorian, & Cantwell, Dennis P. (1987). A prospective psychiatric follow-up of children with speech/language disorders. *Journal of the American Academy of Child and Adolescent Psychiatry, 26*(4), 546-553.

Bashir, Anthony S., & Scavuzzo, Annebelle. (1992). Children with language disorders: Natural history academic success. *Journal of Learning Disabilities, 25*(1), 53-65. EJ 441 364.

Battistich, Victor; Solomon, Daniel; Kim, Dong-il; Watson, Marilyn; & Schaps, Eric. (1995). Schools as communities, poverty levels of student populations, and students' attitudes, motives, and performance: A multi-level analysis. *American Educational Research Journal, 32*(3), 627-658. EJ 512 947.

Beitchman, Joseph H.; Nair, Rama; Clegg, Marjorie; Ferguson, B.; & Patel, P. G. (1986). Prevalence of psychiatric disorders in children with speech and language disorders. *Journal of the American Academy of Child Psychiatry, 25*(4), 528-535.

Camarata, Stephen M.; Hughes, Charles A.; & Ruhl, Kathy L. (1988). Mild/moderate behaviorally disordered students: A population at risk for language disorders. *Language, Speech, and Hearing Services in the Schools, 19*(2), 191-200. EJ 370 416.

Carnegie Task Force on Meeting the Needs of Young Children. (1994). *Starting points: Meeting the needs of our youngest children. The report of the Carnegie Task Force on Meeting the Needs of Young Children.* New York: Carnegie Corporation. ED 369 562.

Catts, Hugh W. (1993). The relationship between speech-language impairments and reading disabilities. *Journal of Speech and Hearing Research, 36*(5), 948-958. EJ 472 679.

Cole, Kevin, & Maddox, Mary. (1997). *Talking and books: Language is the key* [A video-based early language program]. Seattle: Washington Research Institute. ED 469 671.

Cook, Ruth E.; Tessier, Annette; & Klein, M. Diane. (2000). *Adapting early childhood curricula for children in inclusive settings* (5th ed.). Englewood Cliffs, NJ: Merrill.

Dalton, Joan, & Watson, Marilyn. (1997). *Among friends: Classrooms where caring and learning prevail.* Oakland, CA: Developmental Studies Center. ED 414 071.

Developmental Studies Center. (1996). *Ways we want our class to be: Class meetings that build commitment to kindness and learning.* Oakland, CA: Author. ED 393 562.

Dickinson, David K., & Smith, Miriam W. (1994). Long-term effects of preschool teachers' book readings on low-income children's vocabulary and story comprehension. *Reading Research Quarterly, 29*(2), 105-122. EJ 487 825.

Eisenberg, Nancy; Fabes, Richard A.; Murphy, Bridget C.; Shepard, Stephanie; Guthrie, Ivanna K.; Mazsk, Pat; Poulin, Rick; & Jones, Sarah. (1999). Prediction of elementary school children's socially appropriate and problem behavior from anger reactions at age 4-6 years. *Journal of Applied Developmental Psychology, 20*(1), 119-142.

Erikson, Joan M., & Pianta, Robert C. (1989). New lunch, old feelings: What kids bring to school. *Early Education and Development, 1*(1), 15-23.

Espinosa, Linda M., & Burns, Susan M. (in press). Early literacy for young children and non-English speakers. In C. L. Howes (Ed.), *Teaching and learning in the classroom for four-eight year old children.* Baltimore, MD: Brookes.

Fey, Marc E.; Catts, Hugh W.; & Larrivee, Linda S. (1995). Preparing preschoolers for the academic and social challenges of school. In Marc E. Fey, Jennifer Windsor, & Steven F. Warren (Eds.), *Language intervention: Preschool through the elementary years* (pp. 3-37). Baltimore, MD: Brookes.

Goldstein, Arnold P.; McGinnis, Ellen; Sprafkin, Robert P.; Gershaw, N. J.; & Klein, Paul. (2003). *Skillstreaming the adolescent: New strategies and perspectives for teaching prosocial skills.* Champaign, IL: Research Press. ED 416 608.

Gunter, Phillip L., & Coutinho, Martha J. (1997). Negative reinforcement in classrooms: What we're beginning to learn. *Teacher Education and Special Education, 20*(3), 249-264. EJ 581 742.

International Reading Association. (1997). *The role of phonics in reading instruction.* [Position statement of IRA]. Newark, DE: Author. ED 437 647.

Jack, Susan L.; Shores, Richard E.; Denny, R. K.; Gunter, Phillip L.; DeBriere, Terry; & DePaepe, Paris. (1996). An analysis of the relationship of teachers' reported use of classroom management strategies on types of classroom interactions. *Journal of Behavioral Education, 6*(1), 67-87.

Kaiser, Ann P., & Hester, Peggy P. (1997). Prevention of conduct disorder through early intervention: A social-communicative perspective. *Behavior Disorders, 22*(3), 117-130. EJ 550 605.

Kao, Grace, & Tienda, Marta. (1995). Optimism and achievement: The educational performance of immigrant youth. *Social Science Quarterly, 76*(1), 1-19. EJ 515 433.

Karweit, Nancy, & Wasik, Barbara A. (1996). The effects of story reading programs on literacy and language development of disadvantaged preschoolers. *Journal of Education for Students Placed At Risk, 1* (4), 319-348. EJ 538 659.

Kauffman, James M. (2001). *Characteristics of emotional and behavioral disorders of children and youth* (7th ed.). Upper Saddle River, NJ: Merrill. ED 406 799.

Leung, Cynthia B., & Pikulski, John J. (1990). Incidental learning of word meanings by kindergarten and first grade children through repeated read aloud events. *Yearbook of the National Reading Conference* (Vol. 39, pp. 231-239). Chicago: National Reading Conference.

Lewis, Timothy J.; Powers, Lisa J.; Kelk, Michele J.; & Newcomer, Lori L. (2002). Reducing problem behaviors on the playground: An investigation of the application of schoolwide positive behavior supports. *Psychology in the Schools, 39*(2), 181-190. EJ 642 605.

Lewis, Timothy J., & Sugai, George. (1999). Effective behavior support: A systems approach to proactive schoolwide management. *Focus on Exceptional Children, 31*(6), 1-24. EJ 604 910.

Maag, John W. (2001). Rewarded by punishment: Reflections on the disuse of positive reinforcement in education. *Exceptional Children, 67*(2), 173-186. EJ 621 427.

Mautte, Lois A. (1990). The effects of adult-interactive behaviors within the context of repeated storybook reading upon the language development and selected prereading skills of prekindergarten at-risk students. *Florida Education Research Council Research Bulletin, 22*(3), 1-31. ED 344 186.

McGinnis, Ellen, & Goldstein, Arnold. (2003). *Skillstreaming the elementary school child: New strategies and perspectives for teaching prosocial skills*. Champaign, IL: Research Press. ED 416 609.

Meese, Ruth L. (2001). *Teaching learners with mild disabilities* (2nd ed.). Belmont, CA: Wadsworth.

Mercer, Cecil D., & Mercer, Ann R. (2001). *Teaching students with learning problems* (7th ed.). Upper Saddle River, NJ: Merrill.

Morrow, Lesley M.; O'Connor, E. M.; & Smith, Jeffrey K. (1990). Effects of a story reading program on the literacy development of at-risk kindergarten children. *Journal of Reading Behavior, 22*(3), 255-273.

National Center for Education Statistics. (2002). *Participation in education: Elementary and secondary education—Racial/ethnic distribution of public school students* [Online]. Available: http://www.nces.ed.gov//programs/coe/2002/section1/indicator03.asp [2003, July 8].

Olson, Sheryl L. (1992). Development of conduct problems and peer rejection in preschool children: A social systems analysis. *Journal of Abnormal Child Psychology, 20*(3), 327-350.

Olympia, Daniel E.; Heathfield, Lora T.; Jensen, William R.; & Clark, Elaine. (2002). Multifaceted functional behavior assessment for students with externalizing behavior disorders. *Psychology in the Schools, 39*(2), 139-155. EJ 642 602.

Owens, Robert E. Jr.; Metz, Dale E.; & Haas, Adelaide. (2000). *Introduction to communication disorders: A life span perspective*. Boston: Allyn & Bacon.

Pianta, Robert. (1999). *Enhancing relationships between children and teachers*. Washington, DC: American Psychological Association. ED 435 073.

Rice, Mable L. (1993). "Don't talk to him: he's weird": A social consequences account of interactions. In Ann P. Kaiser & David B. Gray (Eds.), *Enhancing children's communication: Research foundations for intervention* (pp. 130-158). Baltimore, MD: Brookes.

Roberts, Michael C. (1996). *Model programs in child and family mental health*. Mahwah, NJ: Erlbaum.

Skinner, Christopher H.; Neddenriep, Christine E.; Robinson, Sheri L.; Ervin, Ruth; & Jones, Kevin. (2002). Altering educational environments through positive peer reporting: Prevention and remediation of

social problems associated with behavior disorders. *Psychology in the Schools, 39*(2), 191-202. EJ 642 606.

Stormont, Melissa. (2001). Preschool family and child characteristics associated with stable behavior problems in children. *Journal of Early Intervention, 24*(4), 241-251. EJ 650 506.

Stormont, Melissa. (2002). Externalizing behavior problems in young children: Contributing factors and early intervention. *Psychology in the Schools, 39*(2), 127-138. EJ 642 601.

Sugai, George, & Lewis, Timothy J. (1996). Preferred and promising practices for social skills instruction. *Focus on Exceptional Children, 29*(4), 1-16. EJ 545 946.

U.S. Census Bureau. (2000). *Language use, English ability, and linguistic isolation for the population 5 to 17 years by state: 2000* [Online]. Washington, DC: Author. Available: http://www.census.gov/population/cen2000/phc-t20/tab02.pdf [2003, September 10].

Valdez-Menchaca, Marta C., & Whitehurst, G. J. (1992). Accelerating language development through picture book reading: A systematic extension to Mexican day care. *Developmental Psychology, 28*(6), 1106-1114. EJ 454 910.

Van Acker, Richard; Grant, Sharon H.; & Henry, David. (1996). Teacher and student behavior as a function of risk for aggression. *Education and Treatment of Children, 19*(3), 316-334. EJ 534 138.

Walker, Hill M. (1998): First steps to prevent antisocial behavior. *Teaching Exceptional Children, 30*(4), 16-19. EJ 562 666.

Walker, Hill M.; Colvin, Geoff; & Ramsey, Elizabeth. (1995). *Antisocial behavior in school: Strategies and best practices*. Pacific Grove, CA: Brooks/Cole. ED 389 133.

Watkins, Ruth V. (1994). Specific language impairments in children: An introduction. In Ruth V. Watkins & Mabel L. Rice (Eds.), *Specific language impairments in children* (pp. 1-15). Baltimore, MD: Brookes. ED 368 192.

Webster-Stratton, Carolyn. (1997). Early intervention for families of preschool children with conduct problems. In Michael J. Guralnick (Ed.), *The effectiveness of early intervention* (pp. 429-453). Baltimore, MD: Brookes.

West, Jerry; Denton, Kristin; & Germino-Hausken, Elvie. (2000). *America's kindergartners: Findings from the Early Childhood Longitudinal Study, kindergarten class of 1998-99*. Washington, DC: National Center for Education Statistics. ED 438 089.

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Table of Contents

The Role of Child Development and Social Interaction in the Selection of Children's Literature to Promote Literacy Acquisition

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Abstract

This article discusses the relationship between children's development and their social interaction with knowledgeable others on the selection of children's literature for the promotion of literacy acquisition. A discussion of the importance of understanding child development to teaching, learning, and the selection of "just right" literature and how to support children's experiences with literature for optimal benefits is included. The paper also discusses a framework for understanding the interrelated nature of the cognitive, social, emotional, linguistic, and literacy development of children; social interaction; and literature selection in grades K-4.

Introduction

She laughed and she cried as she read, and she exclaimed aloud in the high and echoing room: "Wow!" (Spinelli, 1997, p. 74)

A book can serve as a kind of magic ticket to far away or even imaginary places. In the book *The Library Card*, author Jerry Spinelli tells the story of how a magic library card turns out to be the ticket to finding what each young character needs most at the time. This fantastic story certainly illustrates the point that good books can have an important influence on the mind of the reader. Indeed, most of us still remember a favorite book as a child that left a lasting impression. As a toddler, many remember the silly antics and language of a Dr. Seuss book such as *Green Eggs and Ham* or perhaps the comfort and security of Margaret Wise Brown's *Goodnight Moon* or the rhyme and rhythm of the *Mother Goose Tales*. Upon entering the elementary grades, many remember the beautiful friendship between Wilbur and Charlotte in E. B. White's *Charlotte's Web*, the mystery and intrigue in Frances Hodgson Burnett's *The Secret Garden*, or the fanciful imaginary world of Lewis Carroll's *Alice's Adventures in Wonderland*. These books continue to bring joy to our lives today and will live on forever as adults help children experience this joy.

The Importance of Child Development to Teaching, Learning, and Literature

Our images of children-as-learners are reflected, inevitably, in our definition of what it means to teach (Wood, 1988, p. 1).

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The "magic" of literature for children is necessarily bound with the nature of their development. Research in past decades reflects our changing view of how children develop and learn. Children have their own unique needs, interests, and capabilities. We are born with the ability to organize, classify, and impose order on our environment, resulting in the construction of our own unique theory of the world (O'Donnell & Wood, 1999; Wood, 1988). Very little of the content and order of our theory is the result of direct instruction; rather, it is the interaction of biological, cultural, and life experiences that greatly affects the substance of our theory and the way we organize our experiences. As children encounter new experiences, existing memory structures in the brain or schema are reshaped, impacting the linguistic, cognitive, social, and emotional development of children over time. Therefore, "knowledge cannot be *given* directly from the teacher to the learner, but must be *constructed by the learner and reconstructed* as new information becomes available" (Ryan & Cooper, 2000, p. 346). From this point of view, learning is not the result of development; rather, learning *is* development.

"From this perspective, which places instruction at the heart of development, a child's *potential* for learning is revealed and indeed is often *realized* in interactions with more knowledgeable others" (Wood, 1988, p. 24). For example, not too long ago, I visited my friend Diane who has a 4-year-old daughter. We were sitting in her living room talking when her little girl, Rachel, came running into the room with her favorite book *Brown Bear, Brown Bear, What Do You See?* by Bill Martin, Jr., and illustrated by Eric Carle. On each page of the book, a different tissue-paper collage animal is introduced who urges the reader onward to discover which creature will show up next, with a repeated, rhyming, patterned text. She proceeded to crawl into Diane's lap, open the book, and start reciting the text, pointing and commenting on the various illustrations. Anyone looking at this scene would know that Rachel has been read to many, many times and finds great joy in the experience. A closer look might provide insight into how this experience will assist in Rachel's development:

- Positive emotions are created from the established lap reading routine that generates an intimate closeness and feeling of security.
- Interactive social dialogues between Rachel and her mother build on prior knowledge and provide immediate feedback as they discuss each animal as the story progresses.
- The language they use to label, compare, explain, and classify creates a supportive context for structuring the processes of thinking and concept formation.

Each of the domains of development—linguistic, cognitive, social, and emotional—is affected during Rachel's experience, and all play an important role in her development. Although each domain constitutes an entire theoretical approach to child development, no single theory can explain the rich complexity of development (Santrock, 1999).

Supporting Children's Experiences with Literature

Linguistic, social, emotional, and cognitive development are complementary processes that ultimately work together to shape a child's literacy growth (Vygotsky, 1978). Vygotsky, a 20th-century Russian psychologist, theorized that social interaction shapes intellectual development and stressed the importance of language in the development of thought. Sociocognitive theory posits that social interaction is the primary means by which children arrive at new understanding. Rachel, for example, has acquired quite a bit of knowledge about the act of reading over time from these shared book experiences. Diane is a powerful model for Rachel when she demonstrates how to hold a book, which end of the book goes up, and which side is the front; when she takes care to turn the pages, always looks to the right page before moving on to the left page, and starts at the top of the page and moves down; when she reads with tone, inflection, enthusiasm, and expresses excitement and joy; when she points to pictures and words as she reads and pauses to discuss what she is thinking; and when she responds appropriately to Rachel's comments or questions. Rachel is also learning about storybook language, which is different from oral language, and the structure of stories. Vocabulary and concept development are also affected as Diane and Rachel work together to construct a meaningful experience around a common literacy event. From the first time Diane read *Brown Bear, Brown Bear, What Do You See?* aloud to Rachel, she has scaffolded, or made adjustments, in her support based on constant feedback received from Rachel. As Rachel began to internalize the actions and language of her mother, she began to use these tools to guide and monitor her

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own processing behavior until she is now able to take over much of the responsibility for reading the book (Dorn, French, & Jones, 1998).

Barbara Rogoff (1990) considers children to be apprentices as they acquire a diverse repertoire of skills and knowledge under the guidance and support of more knowledgeable persons. "In an apprenticeship setting, adults model the significance of written language as an important tool for documenting and communicating information. As adults and children engage in interactive oral discussions about written language, children acquire important tools of the mind for literacy acquisition" (Bodrova & Leong, 1996, as cited in Dorn, French, & Jones, 1998, p. 3).

Selecting "Just Right" Literature

The selection of literature is key to providing an experience that results in promoting literacy development in that if the literature is not developmentally appropriate then what the child takes from the book and how he responds to the book will be limited or nonexistent. The book *Brown Bear, Brown Bear, What Do You See?* is perfect for Rachel because of its layout; repeated, rhyming, patterned text format; and simple concepts that promote cognitive development. On the other hand, a preservice teacher once told me that she read the very humorous *Piggie Pie* by Margie Palatini aloud to a group of preschoolers; but to her dismay, the preschoolers did not find the book nearly as funny as she did. In the story, a witch, hungry for piggie pie, visits a farm in order to get the main ingredient—pigs. The clever pigs disguise themselves as other farm animals and successfully fool the witch into thinking that the farm has no pigs. She is consoled in the end by a wolf that has also had difficulty finding pigs, and they go off together to "have lunch."

It is not uncommon for there to be differences between what children and adults find to be funny. The reason for this difference is the vast developmental gap between children and adults. "Often when humorous books fail to amuse children, it is indicative of a poor match between children's cognitive-developmental level and the reading material" (Jalongo, 1985, p. 109). Jalongo's research identifies characteristics of children's humor such as "cognitive challenge," or the intellectual ability required to understand a particular joke, and "novelty," or surprise, which is really the cornerstone of humor. If a child doesn't have the correct set of expectations, the unexpected is not surprising. Throughout the story, *Piggy Pie* draws much of its humor from references to other stories and songs such as *The Wizard of Oz*, *The Three Little Pigs*, *Old MacDonald Had a Farm*, *To Grandmother's House We Go*, and an advertising campaign for the *Yellow Pages*, "let your fingers do the walking." The majority of preschoolers, not being familiar with these references, did not find *Piggie Pie* to be very funny.

The preschoolers did find parts of the story to be funny, especially when the pigs dress up like other farm animals. Jalongo (1985) points out, "Because young children are learning to distinguish between fantasy and reality, events that are incongruous with their expectations are considered to be funny" (p. 110). But the level of scaffolding that the teacher would have had to provide to assist the children in meeting the cognitive challenge to understand the expectations on which much of the humor in the book depended would have been considerable. As a result, this literature experience was not as beneficial for the majority of these preschoolers as perhaps another book selection might have been.

Although books at a variety of levels can and should be read to, with, or by children for a variety of reasons, books that are within a child's zone of proximal development are more likely to be intellectually stimulating. According to Vygotsky (1978), the zone of proximal development is "the distance between the actual developmental level as determined through problem-solving under adult guidance or in collaboration with more capable peers" (p. 86). The book *Brown Bear, Brown Bear, What Do You See?* is within Rachel's zone of proximal development, and she derives great joy from it, while many of the textual references from which *Piggie Pie* draws its humor were outside the preschool children's zone of proximal development. A child who is not developmentally ready for a particular book will derive less joy and meaning from it and will respond differently to it. Teachers need to know each child as an individual—his or her level of development, rate of development, and varying interests—in order for the child to receive maximum benefit from his or her experiences with literature.

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A Framework for Integrating Child Development, Social Interaction, and Literature Selection

A framework for understanding the interrelated nature of the cognitive, social, emotional, linguistic, and literacy development of children; social interaction; and literature selection in grades K-4 is provided in the appendix. The purpose of the framework is to provide a general guide for teachers, parents, and other caregivers in the appropriate selection of books that takes into consideration the importance of child development. In the far left-hand column of the framework, an overview of the general developmental characteristics of children in the areas of cognitive, language, social, emotional, and literacy development is provided. The middle column gives examples of important experiences that adults can provide when interacting with children and books based on the implications from the developmental characteristics for each grade level. The column at the far right is a list of suggested books appropriate for each stage of development. The books were selected based on recommendations from teachers, children, parents, and professional literature resources such as children's literature journals and books.

This framework is only approximate and should be informed by ongoing observational information acquired about individual children. With this in mind, the framework will assist in planning appropriate literature experiences and in understanding children's responses to books and book preferences at different levels of development.

Conclusion

Wood (1988) states, "Our ideas about the nature of infancy and childhood dictate the ways in which we think about teaching and education" (p. 1). As teachers, if we believe that child development, teaching, and learning share a reciprocal relationship, then a clear understanding of the general characteristics of child development and our role through social interaction can assist us in selecting books that reflect a child's current developmental needs while promoting progress toward literacy development and the "magic" of reading.

References

Bodrova, Elena, & Leong, Deborah J. (1996). *Tools of the mind: The Vygotskian approach to early childhood education*. Englewood Cliffs, NJ: Merrill.

Dorn, Linda J.; French, Cathy; & Jones, Tammy. (1998). *Apprenticeship in literacy*. York, ME: Stenhouse.

Fountas, Irene C., & Pinnell, Gay Su. (2001). *Guiding readers and writers, grades 3-6: Teaching comprehension, genre, and content literacy*. Portsmouth, NH: Heinemann. ED 451 503.

Jalongo, Mary Renck. (1985). Children's literature: There's some sense to its humor. *Childhood Education, 62*(2), 109-114. EJ 328 574.

O'Donnell, Michael P., & Wood, Margo. (1999). *Becoming a reader: A developmental approach to reading instruction* (2nd ed.). Boston: Allyn & Bacon. ED 428 322.

Rogoff, Barbara. (1990). *Apprenticeship in thinking: Cognitive development in social context*. New York: Oxford University Press.

Ryan, Kevin, & Cooper, James M. (2000). *Those who can, teach* (9th ed.). Boston: Houghton Mifflin.

Santrock, John W. (1999). *Life-span development* (7th ed.). Boston: McGraw-Hill.

Snow, Catherine E.; Burns, M. Susan; & Griffin, Peg (Eds.). (1998). *Preventing reading difficulties in young children*. Washington, DC: National Academy Press. ED 416 465.

Vygotsky, L. S. (1978). *Mind in society: The development of higher psychological processes* (Michael Cole, Vera John-Steiner, Sylvia Scribner, & Ellen Souberman, Eds. & Trans.). Cambridge, MA: Harvard University Press.

Wood, David. (1988). *How children think and learn*. Cambridge, MA: Blackwell.

Children's Literature Cited

Martin, Jr., Bill. (1992). *Brown Bear, Brown Bear, What do you see?* (Eric Carle, Illus.). New York: Henry Holt.

Palatini, Margie. (1997). *Piggie pie!* (Howard Fine, Illus.). New York: Houghton Mifflin.

Spinelli, Jerry. (1997). *The library card*. New York: Scholastic.

Appendix

A Framework for Integrating Child Development, Social Interaction, and Literature Selection

Preschool–Kindergarten

Readers seek out and enjoy experiences with books and print; become familiar with the language of literature and the patterns of stories; understand and follow the sequence of stories read to them; begin to acquire specific understandings about the nature, purpose, and function of print; experiment with reading and writing independently, through approximation; and see themselves as developing readers and writers.[5]

General Characteristics of Children	Implications for Adults for Social Interaction	Literature Selection
Cognitive Development • Begins to understand spatial, perceptual, and attributional relationships • Can retell a short story; has a vague concept of time; can count to 10 and knows primary colors **Language Development** • Experiences rapid vocabulary growth and speech development; uses correct verb and	• Importance of reading aloud simple picture books with easily identifiable characters and happy endings and poetry several times a day at school and at home • Importance of actively involving children in shared reading in which they can participate in the reading process • Importance of selecting literature about everyday experiences that also expands language and concept development,	• *Today I Feel Silly* (Jamie Lee Curtis) • *Look! Look! Look!* (Tana Hoban) • Mother Goose rhymes • *Ten, Nine, Eight* (Molly Bang) • *ABC I Like Me!* (Nancy L. Carlson) • *No, David!* (David Shannon) • *A Color of His Own* (Leo Lionni) • *Red Light, Green Light* (Margaret Wise Brown) • *A House Is a House for Me* (Mary Ann

pronoun tense; uses language to explore the environment; enjoys playing with sound and rhythm in language • Enjoys dramatic/role/creative play • Understands that there is a connection between language and print **Social and Emotional Development** • Begins to develop relationships with other children and enjoys participating in group activities and games that use imagination • Understands that others have feelings, too; expresses feelings through facial expressions • Wants to help around the house and with younger siblings; takes pride in accomplishments; exhibits anxiety or fears (e.g., of the dark); likes to go to new and familiar places; likes to play with favorite toys	encourages curiosity about the world, and engages the imagination • Importance of providing opportunities to respond to literature with peers and the teacher and also through writing/drawing • Importance of providing, with guidance, opportunities for students to self-select fiction and nonfiction books, including alphabet, number, and concept books and books that include environmental print	Hoberman) • *Peter's Chair* (Ezra Jack Keats) • *Mouse Paint* (Ellen Stoll Walsh) • *Noisy Nora* (Rosemary Wells) • *Five Little Monkeys* (Eileen Christelow) • *Bashi, Baby Elephant* (Theresa Radcliffe) • *Color Zoo* (Lois Ehlert) • *Brown Bear, Brown Bear, What Do You See?* (Bill Martin, Jr.) • *From Head to Toe* (Eric Carle) • *Chicka Chicka Boom Boom* (Bill Martin, Jr.) • *The Three Little Pigs* (James Marshall) • *Hop on Pop* (Dr. Suess) • *Harold and the Purple Crayon* (Crockett Johnson) • *The Tale of Peter Rabbit* (Beatrix Potter) • *Millions of Cats* (Wanda Gag) • *Tell Me A Story, Mama* (Angela Johnson) • *Feast for 10* (Cathryn Falwell) • *The Bus for Us* (Suzanne Bloom) • *Dear Zoo* (Rod Campbell) • *Trucks, Trucks, Trucks* (Peter Sis)

Literacy Development**

- Enjoys listening and talking about stories and understands that print carries a message
- Identifies letters and letter-sound relationships and writes letters or approximations of letters and high frequency words
- Demonstrates logographic knowledge by identifying labels, signs, cereal boxes, and other types of environmental print
- Begins to pretend-read and engage in paper-and-pencil activities that include various forms of scribbling and written expression
- Understands basic concepts of print, such as left-to-right, top-to-bottom orientation
- Enjoys being read to and begins to engage in sustained reading and writing activities
- Becomes familiar with rhyming
- Develops a sense of story/story grammar/storybook reading behavior through interaction with storybooks

First and Second Grades

*Readers understand that reading is a meaning-making process; acquire sight vocabulary; make balanced use of the cueing systems in written language (syntax, semantics, and graphophonemics) to identify words not known at sight; and see themselves as readers and writers.**

General Characteristics of Children	Implications for Adults for Social Interaction	Literature Selection
Cognitive Development • Enjoys listening to stories read aloud and can listen to longer stories due to an increased attention span; still needs concrete experiences to learn • Understands relationships among categories • Has a vague understanding of time • Is beginning to understand the difference between fantasy and reality **Language Development** • Continues to add words to the his or her vocabulary and uses increasingly complex sentences **Social and Emotional Development** • Begins to develop a sense of humor • Has definite, inflexible ideas of right and wrong • Occasionally challenges parents and argues with siblings but continues to need security of family relationships • Continues to take pride in accomplishments, sometimes showing assertiveness and initiative	• Continued importance of reading aloud picture books and poetry several times a day at school and at home • Importance of reading aloud short chapter books in which each chapter contains independent episodes • Continued importance of small group and whole group opportunities to respond to literature with peers and the teacher and through writing/drawing—becoming more sustained overtime • Continued importance of actively involving children in shared reading in which they observe the teacher demonstrate concepts about print and model using appropriate reading strategies with both fiction and nonfiction texts and involving student participation • Importance of initial reading experiences being enjoyable using books with familiar concepts and experiences with predictable, repeated patterned text and then moving into longer texts with more complex structure • Importance of giving children, with guidance, ample opportunities to select both fiction and nonfiction books on their own from a wide	• *Where the Wild Things Are* (Maurice Sendak) • *Ramona* books (Beverly Cleary) • *Junie B. Jones* books (Barbara Park) • *Frog and Toad* books (Arnold Lobel) • *A Chair for My Mother* (Vera B. Williams) • *When Sophie Gets Angry—Really, Really Angry* (Molly Garrett Bang) • *Pete's Pizza* (William Steig) • *Crow Boy* (Taro Yashima) • *Julius* (Angela Johnson) • *Tops and Bottoms* (Janet Stevens) • *Ira Sleeps Over* (Bernard Waber) • *The Terrible, Horrible, No Good Very Bad Day* (Judith Viorst) • *Toasting Marshmallows: Camping Poems* (Kristine O'Connell George) • *Too Many Tamales* (Gary Soto) • *Make Way for Ducklings* (Robert McCloskey) • *Henry and Mudge* books (Cynthia Rylant) • *The Relatives Came* (Cynthia Rylant) • *My Little Sister Ate One Hare* (Bill Grossman) • *The Talking Eggs: A Folktale from the American South*

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• Seeks teachers' praise • Is curious about gender differences	variety of topics and to recommend books through book talks to other children • Importance of providing children with opportunities for storytelling and dramatization of stories	(Robert D. San Souci) • *Sam, Bangs, and Moonshine* (Evaline Ness) • *Lilly's Purple Plastic Purse* (Kevin Henkes) • *How Babies Are Made* (Andrew C. Andry and Ste~en Schepp) • *Grandfat! er's Journey* (Allen Say) • *A Light in the Attic* (Shel Silverstein) • *The Bee Tree* (Patricia Polacco) • *10 Minutes till Bedtime* (Peggy Rathmann)

Literacy Development**

- Begins to read, write, and retell simple stories transitioning to longer stories with an increase in fluency and use of cognitive and metacognitive strategies more efficiently when comprehending and composing
- Develops greater word identification strategies, sight word recognition, conventional spelling, and sustained silent reading
- Reads orally initially and begins to read silently
- Uses letter-sound information along with meaning and language to solve words

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Third and Fourth Grades

*Readers increase fluency in reading and writing, increase motivation to read and write, and focus on meaning in reading and writing.**

General Characteristics of Children	Implications for Adults for Social Interaction	Literature Selection
Cognitive Development • Begins to exhibit independence in reading, but a wide range of reading abilities and interests prevail • Continues to develop concept of time and space • Exhibits	• Continued importance of reading aloud more sophisticated picture books and poetry every day • Importance of reading aloud longer chapter books with more variety, perspectives, and issues to promote interest and appreciation for a variety of genre • Continued importance of sustained small group and whole group opportunities to respond to literature with peers and the teacher and through writing • Continued importance of actively involving children in small group	• *Mufaro's Beautiful Daughters: An African Tale* (John Steptoe) • *The Boy Who Drew Cats: A Japanese Folktale* (Arthur A. Levine) • *Tales of a Fourth Grade Nothing* (Judy Blume) • *Little House*

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improved memory with *increased* attention span • Begins to connect ideas and concepts as thoughts become flexible and reversible, increasing capacity for problem solving, categorizing, and classifying **Language Development** • Exhibits increasing vocabulary • Increases use of connectors such as *meanwhile, unless,* and *although* **Social and Emotional Development** • Begins to be influenced by social situation and peers • Exhibits more interest in sports and hobbies • Searches for values and is influenced by models other then the family—TV, movies, music, sports, books • Begins to develop empathy for others as concepts of right and wrong become more flexible	and whole group shared reading in which the teacher engages students in discussion/modeling/demonstrations of more complex reading strategies that promote understanding of literary devices, vocabulary development, connections to text, and graphic aids in fiction and nonfiction texts • Importance of providing, with guidance, opportunities for students to self-select fiction and nonfiction books, including series books, biographies, how-to-books, riddles, comics, and magazines • Continued importance of providing children with opportunities for storytelling and dramatization of stories, reader's theatre, and choral reading	books (Laura Ingalls Wilder) • *Attaboy, Sam!* (Lois Lowry) • *The Girl Who Loved Wild Horses* (Paul Goble) • *Martin's Big Words* (Doreen Rappaport) • *Just A Dream* (Chris Van Allsburg) • *More Rootabagas* (Carl Sandburg) • *Joey Pigza Loses Control* (Jack Gantos) • *The Lion, the Witch, and the Wardrobe* (C. S. Lewis) • *A Bear for Miguel* (Elaine Marie Alphin) • *Magic Schoolbus* books (Joanna Cole) • *Finding Out about Whales* (Elin Kelsey) • *Harry Potter and the Sorcerer's Stone* (J. K. Rowling) • *Time Warp Trio* books (Jon Scieszka) • *Can Jensen* books (David Adler) • *When Marian Sang* (Pam Munoz Ryan) • *George Washington's Breakfast* (Jean Fritz) • *The American Girl* books (Connie Rose Porter et al.) • *Nate the Great* books (Marjorie Weinman Sharmat) • *Joyful Noise: Poems for Two*

		Voices (Paul Fleischman) • *Because of Winn-Dixie* (Kate DeCamillo) • *Encounter* (Jane Yolen) • *Earth Lines: Poems for the Green Age* (Pat Moon) • *Stone Fox* (John Reynolds Gardner) • *Wilma Unlimited: How Wilma Rudolph Became the World's Fastest Woman* (Kathleen Krull)

Literacy Development**

- Reads silently most of the time and reads fluently when reading aloud
- Has a large core of known words that are recognized automatically
- Is moving toward sustained reading of texts with many pages that require reading over several days or weeks
- Knows how to read differently in different genres
- Connects texts with previously read texts
- Begins to identify with characters in books and to see himself or herself in the events of the stories
- Becomes absorbed in books
- Is in a continuous process of building background knowledge and realizes that he or she needs to bring his or her knowledge to reading
- Has systems for learning more about the reading process as he or she reads so that he or she builds skills simply by encountering many different kinds of texts with a variety of new words
- Interprets and uses information from a wide variety of visual aids in expository texts
- Analyzes words in flexible ways and makes excellent attempts at new, multisyllable words

* Adapted from *Becoming a Reader: A Developmental Approach to Reading Instruction* (O'Donnell & Wood, 1999).

** Adapted from *Preventing Reading Difficulties in Young Children* (Snow, Burns, & Griffin, 1998) and *Guiding Readers and Writers, Grades 3-6: Teaching Comprehension, Genre, and Content Literacy* (Fountas & Pinnell, 2001).

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Discriminant Validity of a Community-Level Measure of Children's Readiness for School

David A. Murphey
State of Vermont, Agency of Human Services

Abstract

Discriminant validity of a measure of children's readiness for school was assessed by testing whether it distinguished between groups of children hypothesized to differ, on the basis of demographic characteristics, in their school readiness. The volunteer sample consisted of 3,370 kindergartners in Vermont public schools. Previous group care experience, identified learning-related disabilities, and a community-level measure of poverty were used as independent measures in analyses of children's readiness scores in four conceptual domains. Statistically significant relationships were found between prior group care experience and readiness in each of the domains, and between disability status and readiness in each of the domains. In addition, there were significant negative correlations between community-level poverty and community-level readiness in three of the domains. Results are discussed in terms of their value in establishing credibility for a school readiness measure that can serve to inform a community's efforts to address improvements in the early care and education of children.

Introduction

Assessing young children's readiness to enter school "ready to learn" has become a priority for nearly every state and for many local education jurisdictions. However, the specific forms these assessments take vary widely, from brief "screening" tests to comprehensive, in-depth child studies (Mehaffie & McCall, 2002; Meisels & Atkins-Burnett, 2000). Likewise, the results of assessments may be used to identify individual children as "ready" or "not ready" and thus eligible for particular supports or services; or they may serve as indicators, at an aggregate level, of the success of collaborative community efforts to ensure that all children receive high-quality early care and education (Murphey & Burns, 2002).

In any case, a challenge for those developing and using "readiness" assessments is to demonstrate that such measures are in fact valid indices—that they measure what they purport to measure. Content validity is perhaps of prime importance here, and any "readiness" measure should pass the critical review of early childhood professionals, kindergarten teachers, and parents. In addition, the measure should address the five readiness domains around which there is now broad consensus (National Education Goals Panel, 1992). Establishing other forms of validity can be more problematic. In particular, predictive validity is inappropriate in this context because of the rapid and uneven development typical of young children.

Discriminant validity, however, is a reasonable aim for school readiness instruments. Discriminant validity refers to a measure's ability to distinguish among groups that theory claims ought to be so

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distinguished. Thus, discriminant validity of a readiness-for-school measure would be supported if the measure distinguished between groups hypothesized to be more or less "ready" than others.

Although the construct of "school readiness" is still fairly new in the literature, there is considerable empirical research to suggest the individual characteristics and the family and community resources and experiences for young children with which it should be associated. All other things being equal:

- Children living in poor families are likely to be less "ready" than children living in non-poor families (Resnick et al., 1999; West, Denton, & Germino-Hausken, 2000).
- Children who have had experience prior to kindergarten in formal, group care (child care center, family day care home, Head Start, etc.), assuming it was of good quality, are likely to be more "ready" than those who had not had such experience (Barnett, 1995; Xiang & Schweinhart, 2002).
- Children who have significant learning-related disabilities are likely to be less "ready" than those who do not.

The validity of school readiness measures that fail to make such distinctions could be considered suspect.

The present study used data from Vermont's "School Readiness Initiative"—specifically, data from its "Ready Kindergartners" component—to examine these relationships. In doing so, its aim was also to provide further validation for this brief, teacher-reported assessment of children's readiness.

Method

Ready Kindergartners Instrument

The "Ready Kindergartners" instrument is a 24-item questionnaire completed by kindergarten teachers 4 to 6 weeks after the beginning of the school year, for each student. The items cover four readiness domains: (1) social and emotional development, (2) approaches to learning, (3) communication, and (4) cognitive development and general knowledge (the fifth domain, physical health and well-being, is only partly assessed by this instrument; school nurses provide additional information). On the basis of their interactions since the start of school, teachers are instructed to rate children on each item as "beginning," "practicing," "performing independently," or "not observed."

Items were selected based on extensive review of the kindergarten readiness literature, including examples of measures in use in other states. They were further refined by an expert group that included public health, education, mental health, and human services policy makers, in addition to providers of early childhood services and researchers from the University of Vermont's Department of Psychology.

Relying on kindergarten teachers as informants on children's school readiness of course has its limitations. Although teachers have a great deal of expert knowledge of, and experience with, young children, their ratings may be unreliable, particularly on a relatively unstructured assessment. To mitigate these concerns, the teacher rating instrument was the subject of extensive pilot testing with kindergarten teachers, along with focus group input from kindergarten teachers. However, the measure is not intended to have validity at an individual child level but to provide an indicator of kindergarten readiness at a community level. More detailed information on the instrument, including its basic psychometric properties and internal reliability, has been previously published (Murphey & Burns, 2002).

For purposes of the present study, children were considered "ready" on a domain if teachers rated their performance on each item within that domain as "practicing" or "performing independently."

Children's experience in child care prior to kindergarten was assessed by asking kindergarten teachers to indicate for each child whether prior to kindergarten this student was in a regulated early childhood

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program. (Regulated was defined as licensed centers, registered family day care homes, Head Start, or other preschool). Teachers could respond with "yes ," "no ," or "don't know." Teachers were not asked to report on the source of this information.

Children's disability status was assessed by asking teachers to indicate for each child whether he or she qualified for special education or Section 504 services.

No family income information was available. However, community poverty-level was estimated as the percentage of enrolled public elementary school students receiving free or reduced-price school meals, by school supervisory union, as reported by the state department of education.

Sample Characteristics

The sample consisted of all valid records on children (N = 3,730) submitted by kindergarten teachers in the fall of 2001. Two hundred fifty teachers (63% of those contacted) responded, representing each of Vermont's 60 supervisory unions. Table 1 shows detailed characteristics of the responding teachers and of the children on whom they reported.

Table 1
Sample Characteristics

Respondents	Characteristics
Kindergarten teachers*	
Mean length of experience with kindergarten teaching	10.4 years, *sd* = 7.3
Mean length experience with teaching (total)	17 years, *sd* = 8.8
Have elementary education license	1.6%
Have early childhood endorsement	34.4%
Teach half-day program	46.4%
Teach full-day, 5 days/week program	37.1%
Teach full-day, partial-week program	12.9%
Kindergarten children (kindergarten teacher report)**	
Qualifies for special education services	11.1%
Qualifies for ESL/bilingual services	1.8%
Qualifies for Sec. 504 services	1.5%
Teacher reports on child's experience prior to kindergarten	
Was in regulated early childhood program	69.2%
Was not in regulated early childhood program	16.6%
"Don't know"	11.8%
Missing response	2.3%
*250 Responding out of 396 estimated possible respondents; 63.1%. **3,730 Responding out of 6,289 estimated possible respondents; 59.3%.	

A follow-up study of a random sample of non-respondents ($N = 40$) showed minor differences between teachers who returned child assessments and those who did not. The two groups of teachers were alike on years of experience in the teaching profession, on years as kindergarten teachers specifically, and on the proportion of their students who had attended pre-kindergarten programs. Non-responders had slightly larger classes (median = 16, vs. 15, $p < .05$) and a greater proportion of classes where one or more children qualified for special services other than special education (Section 504 services: 47% vs. 15%, $p < .05$; ESL/bilingual services: 34% vs. 16%, $p < .05$). Non-responders were less likely to hold an early childhood endorsement (8% vs. 34%, $p < .05$) and were more likely to teach a class that was something other than a 5-day-per-week half-day or full-day program (37% vs. 13%, $p < .05$).

Results

Relationship of Kindergarten Readiness to Prior Experience in an Early Childhood Program

Chi-square tests were used to examine, for each of the four readiness domains, any differences between children who were or were not in an early childhood program (records for children where teachers did not know their child care history were excluded from the analysis). As shown in Table 2, there were significant differences in favor of children with child care experience in each domain. The largest difference was in *cognitive development and general knowledge*, where 70% of children with child care experience were performing at criterion on all items, compared with 56% of children without child care experience. In an additional test (ANOVA), where the number of domains (0-4) in which a child failed to meet criterion was the dependent measure, and child care experience the independent measure, there was also a significant difference: the mean number of domains in which children did not meet criterion was 1.22 for those with child care experience and 1.63 for those without ($F = 37.47$, $p < .01$).

Table 2
School Readiness (Four Domains) by Children's Prior Early Education Experience

	Percent "Practicing" or "Performing Independently" on All Items		
Readiness Domain	**No Early Education Experience Indicated**	**Early Education Experience Indicated**	**Chi-Square**
Social and emotional development	54.4	63.5	17.18*
Approaches to learning	51.1	60.5	18.15*
Communication	74.6	83.1	23.95*
Cognitive development and general knowledge	56.4	70.4	44.71*
*$p < .01$.			

Relationship of Kindergarten Readiness to Receipt of Special Education or Section 504 Services

Chi-square tests were used to examine, for each of the four readiness domains, any differences between children who were or were not receiving special education or Section 504 services. As shown in Table 3, there were significant differences in favor of children not receiving services in each domain. The

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magnitude of differences (all greater than 30 percentage points) was fairly consistent across the four domains. In an additional test (ANOVA), where the number of domains (0-4) in which a child failed to meet criterion was the dependent measure, and service receipt status was the independent measure, there was also a significant difference: the mean number of domains in which children did not meet criterion was 2.54 for those receiving services, and 1.16 for those without such designation ($F = 370.20$, $p < .01$).

Table 3
School Readiness (Four Domains) by Children's Receipt of Special Education or Section 504 Services

	Percent "Practicing" or "Performing Independently" on All Items		
Readiness Domain	**Does Not Qualify for Special Education or Section 504**	**Qualifies for Special Education or Section 504**	**Chi-Square**
Social and emotional development	64.8	31.9	184.11*
Approaches to learning	62.3	26.9	208.27*
Communication	85.3	49.8	331.03*
Cognitive development and general knowledge	71.2	37.1	213.84*
* $p < .01$.			

Relationship of Community-Level Kindergarten Readiness to Community-Level Poverty Status

By supervisory union, the percentage of kindergartners reaching criterion on each of the four readiness domains was calculated. Pearson correlations (one-tailed) were computed between these community-level scores and the percentage of elementary school children qualifying for free or reduced-price school meals. As shown in Table 4, correlations were significant in two domains (*communication* and *cognitive development and general knowledge*), approached significance in another (*approaches to learning*), and were nonsignificant for *social and emotional development*. In all cases of significance or near significance, higher poverty was associated with lower readiness scores.

Table 4
Correlations (One-Tailed) between Community Poverty* and Community-Level School Readiness (Four Domains)

Readiness Domain	
Social and emotional development	-.121 (ns)
Approaches to learning	-.215**
Communication	-.223***
Cognitive development and general knowledge	-.330****
*Measured by percent of enrolled public elementary school students eligible for free or reduced-price school meals.	

** $p < .06$.
*** $p < .05$.
**** $p < .01$.

Discussion

Assessment of school readiness (like any assessment) carries potential for misuse (Shepard, Kagan, & Wurtz, 1998). Perhaps the most fundamental such threat is failing to demonstrate plausible relationships to other recognized measures of children's experiences. Establishing the credibility of school readiness measures is essential to gaining the engagement of the stakeholders—early child care providers, school personnel, parents, and other community members—recognized as critical to improving the well-being of children in this arena.

The present study shows that a carefully constructed, brief measure of readiness for kindergarten can be related meaningfully (and plausibly) to what we know about some of the individual-level and community-level correlates of early success in school; however, some limitations of the study should be noted.

Although the sampling frame included all Vermont public school kindergarten teachers, there was a degree of self-selection bias in the sample of teachers who responded. In particular, the sample under-represented classrooms with children receiving Section 504 and some other special services. In addition, the sample over-represented teachers with an early childhood endorsement; Chi-square analyses (not shown here) showed that teachers with that credential are more likely than those without to rate children as "ready." However, it is not clear how including the non-responders would have altered these findings.

For information on children's participation in early child care, we relied upon teachers' reports. It is possible that teachers are not reliable providers of this information, and for 12% of students, teachers acknowledged that they did not know the children's child care history. Moreover, no information was available on the timing, duration, frequency, stability, or (perhaps most important) quality of the child care experience. Teachers' knowledge of children's child care experience and of their status with respect to special services introduces the possibility of halo effects; however, it is difficult to imagine an assessment relying on teachers who have no such knowledge of their students.

In the community-level analysis, the relationship between poverty and school readiness is probably attenuated, because individual differences on both constructs are not reflected. However, the social-ecological perspective argues that community-level effects can make important contributions to individual well-being.

The predictive validity of the readiness assessment remains to be established, although as argued previously, there are good reasons to believe such relationships may be weak. Although ruled out in the present study by concerns about privacy, in the future, including student identifiers on the readiness assessment will allow direct tests of association between these scores and later student academic assessments.

Despite certain limitations, however, this study's results provide an important degree of external validity for a brief, teacher-reported measure of children's readiness for kindergarten. In a time when schools are under pressure to administer numerous student-based assessments, use of a brief readiness measure has some advantages, particularly if it can be shown to relate meaningfully to known predictors of early school success and to concurrent and subsequent measures of school achievement. In addition, the assessment strategy described here can function as a "ready for school" accountability measure at a community/systems level, while avoiding the potentially negative implications that may attend "high stakes" child-based measures.

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References

Barnett, W. Steven. (1995). Long-term effects of early childhood programs on cognitive and school outcomes. *Future of Children, 5*(3), 25-50. EJ 523 962.

Mehaffie, Kelly E., & McCall, Robert B. (2002, June). *Kindergarten readiness: An overview of issues and assessment* (Special Report). Pittsburgh, PA: University of Pittsburgh Office of Child Development.

Meisels, Samuel J., & Atkins-Burnett, Sally. (2000). The elements of early childhood assessment. In Jack P. Shonkoff & Samuel J. Meisels (Eds.), *Handbook of early childhood intervention* (2nd ed., pp. 231-257). New York: Cambridge University Press.

Murphey, David A., & Burns, Catherine E. (2002). Development of a comprehensive community assessment of school readiness. *Early Childhood Research & Practice* [Online], *4*(2). Available: http://ecrp.uiuc.edu/v4n2/murphey.html [2003, July 1].

National Education Goals Panel. (1992). *Resolutions of the National Education Goals Panel: Assessing progress: Goal 1*. Washington, DC: Author.

Resnick, Michael B.; Gueorguieva, Ralitza V.; Carter, Randy L.; Ariet, Mario; Sun, Yuanshan; Roth, Jeffrey; Bucciarelli, Richard L.; Curran, John S.; & Mahan, Charles S. (1999). The impact of low birth weight, perinatal conditions, and sociodemographic factors on educational outcome in kindergarten. *Pediatrics, 104*(6), e74-e84.

Shepard, Lorrie; Kagan, Sharon Lynn; & Wurtz, Emily (Eds.). (1998). *Principles and recommendations for early childhood assessments*. Washington, DC: National Education Goals Panel. ED 416 033.

West, Jerry; Denton, Kristin; & Germino-Hausken, Elvie. (2000). *America's kindergartners: Findings from the Early Childhood Longitudinal Study, kindergarten class of 1998-99, fall 1998*. (Report No. NCES 2000-070). Washington, DC: National Center for Education Statistics. ED 438 089.

Xiang, Zongping, & Schweinhart, Lawrence J. (2002). *Effects five years later: The Michigan School Readiness Program evaluation through age 10*. Ypsilanti, MI: High/Scope Educational Research Foundation.

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Reaching Out to Fathers: An Examination of Staff Efforts That Lead to Greater Father Involvement in Early Childhood Programs

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Abstract

In recent years, researchers and practitioners have become increasingly interested in father/male involvement in early childhood programs. However, few empirical studies have examined early childhood educators' efforts to involve fathers in such programs. The purpose of the present investigation was to assess early childhood educators' efforts to involve fathers and to determine which efforts lead to greater success at overall father involvement. Surveys were completed by 213 early childhood educators attending regional training events. Findings demonstrate that efforts are being made in a number of areas to increase father involvement. Multiple regression analysis revealed that three factors significantly accounted for early childhood educators' success at involving fathers: (1) including the father's name on the enrollment form, (2) sending written correspondence to fathers even if they live apart from their children, and (3) inviting fathers to the center to participate in educational activities with their children. Implications for practitioners are discussed.

Introduction

Child care by someone other than a parent has become a reality for millions of children across the United States. According to recent estimates from the National Center for Education Statistics, approximately 54% of children birth through third grade (roughly 20 million) receive some form of nonparental child care on a regular basis. For children ages 3 to 5 who have not yet started kindergarten, 60% attend center-based early childhood programs, which include Head Start, day care centers, nursery schools, and various other preschool programs. From 1996 to 1999, the percentage of children within this age bracket attending early childhood programs increased from 55% to 60% (Federal Interagency Forum on Child and Family Statistics, 2001).

Given that such a large percentage of children are spending as much, if not more, of their waking hours in nonparental care arrangements, parents are faced with the challenge of finding ways to remain involved in their children's lives. One avenue that parents can pursue to fill this gap is through active involvement in their children's early childhood and school-age programs. Researchers have consistently found a positive relationship between level of parental involvement and children's academic success during the school-age years (Henderson & Berla, 1994; Henderson & Mapp, 2002; Stevenson & Baker, 1987). High levels of parental involvement are associated with higher student grades and test scores, better attendance, higher

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rates of homework completion, more positive student attitudes and behavior, higher graduation rates, and greater enrollment rates in postsecondary education (Henderson & Mapp, 2002).

The positive benefits of parental involvement do not appear to be limited to school-age children. Emerging evidence indicates that parental involvement in children's early childhood programs can have a very positive influence on children's academic outcomes, especially when programs offer training opportunities to parents on how to become more involved at home and in the centers (Eldridge, 2001; Fagan & Iglesias, 1999; Marcon, 1999; Starkey & Klein, 2000). In a three-year study of 708 preschoolers in the Washington, DC, area, Marcon (1999) discovered that increased parent involvement (e.g., volunteering at school, attending parent-teacher conferences, participating in home visits, helping with class activities) was significantly related to children's mastery of skills in all subject matter areas. Positive child outcomes were also noted in a series of experimental studies conducted with African American and Latino Head Start families (Starkey & Klein, 2000). Head Start staff provided training to mothers on how to use math activity kits with their children at home. Results indicate that children in the program developed greater math knowledge and skills compared with a control group (Starkey & Klein, 2000).

Father Involvement in Early Childhood Programs

In recent years, greater attention has been given to father and father-figure involvement in early childhood programs (Fagan, 2000; Fagan & Iglesias, 1999; Levine, 1993; McBride & Rane, 1997; McBride, Rane, & Bae, 2001; Turbiville, Umbarger, & Guthrie, 2000). This interest is primarily focused on Head Start and Early Head Start programs (Cabrera, Tamis-LeMonda, Lamb, & Boller, 1999); however, efforts to involve fathers in a variety of other early childhood and after-school programs have also been pursued (Levine, Murphy, & Wilson, 1998; Levine & Pitt, 1995; McBride, Rane, & Bae, 2001). A growing body of research has led to an awareness of the important role that fathers can occupy in their children's development (Lamb, 1997; Marsiglio, Amato, Day, & Lamb, 2000; Parke, 1996; Yogman, Kindlon, & Earls, 1995). Children who grow up with actively involved and nurturing fathers (as opposed to uninvolved fathers) reap numerous benefits, including better school performance (Grolnick & Slowiaczek, 1994; Nord, Brimhall, & West, 1997), increased self-esteem (Radin, 1994), healthier relationships with peers (Mosley & Thompson, 1995; Snarey, 1993), healthier sex-role development (Radin, 1986), and access to greater financial resources (Horn & Sylvester, 2002).

Studies indicate that when specific efforts are made to involve fathers and father-figures in early childhood programs, these men are more likely to participate. Fagan and Iglesias (1999) discovered that when traditional parental involvement activities were adapted for fathers of preschool-age children in Head Start, overall involvement increased, and fathers' involvement led to improvements in their children's mathematics readiness scores. In a more recent study, McBride, Rane, and Bae (2001) examined the impact of an intervention program aimed at state-funded preschool teachers. Staff members were trained to encourage and facilitate father/male involvement in their programs. When compared with a control group, the researchers found that the treatment site was significantly more successful at involving fathers.

Despite recent efforts to involve fathers, some fathers hesitate to participate in their children's early care arrangements (Levine, Murphy, & Wilson, 1998; McBride & Rane, 1997; McBride, Rane, & Bae, 2001). Possible barriers to involvement include teacher and staff attitudes toward father involvement, mothers' attitudes toward father involvement, societal views concerning male involvement in child care, family/cultural beliefs, fathers' educational level, irregular work schedules, and lack of knowledge on the part of fathers of how to become involved (Fagan & Iglesias, 1999; Levine, Murphy, & Wilson, 1998; McBride & Rane, 1997).

Purpose of Study

Recent studies on father involvement in early childhood settings (e.g., Fagan & Iglesias, 1999; Frieman, 1998; Levine, Murphy, & Wilson, 1998; McBride & Rane, 1997; McBride, Rane, & Bae, 2001) have

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contributed significantly to the knowledge base surrounding this issue. However, more studies are needed to help researchers and practitioners gain a more thorough understanding of the factors that influence fathers' participation in their children's early childhood programs, including what program staff are doing to facilitate this process. Therefore, the purpose of the present investigation was twofold: (1) to examine early childhood educators' efforts to involve fathers in their programs, and (2) to determine which program efforts lead to greater father involvement.

Theoretical Basis

Underlying this investigation is Epstein's (2001) theory of "overlapping spheres of influence," which takes into account the three major contexts in which children learn and develop—school, family, and community. According to the theory, all three contexts influence, and are influenced by, one another's decisions with regard to their desire for closeness or separateness. For example, educational institutions can make concerted efforts to bring all three spheres of influence closer together through frequent and high-quality interactions with families and communities, or they can choose to keep the spheres relatively separate (Epstein, Sanders, Simon, Salinas, Jansorn, & Van Voorhis, 2003). Families (i.e., parents), within certain constraints, can make similar choices with regard to how involved they want to become in their children's learning environments. Optimally, children's potential for success is enhanced when all three spheres are brought closer together.

The theory is particularly useful for understanding the role of schools (early childhood programs in this case) and families in fostering greater parental involvement in children's learning environments. Out of Epstein's framework and an extensive body of empirical research have emerged six types of involvement: (1) parenting, (2) communicating, (3) volunteering, (4) learning at home, (5) decision making, and (6) collaborating with community (Epstein et al., 2003). Although Epstein acknowledges the role of each sphere in fostering a positive learning environment for children, much of the responsibility for creating successful partnerships lies with educational institutions and their personnel (e.g., teachers, administrators).

One of the major tenets of the theory is that greater collaboration between spheres (i.e., families and school) will result in positive benefits for students, parents, and teachers (Epstein, 2001; Epstein et al., 2003). The theory predicts that students will do better academically and socially by experiencing a closer connection between home and school environments. Parents are predicted to benefit by establishing a closer relationship with their child's teacher(s), while also gaining a better understanding of their child's learning environment. Teachers are predicted to gain a better understanding of families' backgrounds, cultures, concerns, needs, and unique strengths. Equipped with this knowledge, teachers, it is thought, will be more inclined to involve parents in novel ways in their centers.

Epstein's theory is useful in the present context for understanding how educators can encourage greater father involvement in children's early childhood programs. When special efforts are made to increase fathers' participation in children's early childhood settings, the theory predicts that the two spheres under consideration (i.e., home and school) will experience a greater closeness, or connection, thus leading to better outcomes for children. This connection is facilitated when early childhood educators seek to gain a better understanding of the position of the father in the child's family, including his cultural background, educational level, relationship with his child (e.g., custodial vs. noncustodial), employment status, willingness to participate in his child's education, and his unique strengths as a parent. When early childhood educators become more familiar with the fathers of the children in their care, they can make special efforts to involve fathers in their centers through activities such as parent-teacher conferences, special educational events, and parent volunteer opportunities (e.g., field trips, career day, facility maintenance). Special effort on the part of early childhood educators to reach out to fathers can have the desired effect of stimulating greater father involvement in children's learning environments both at home and at the centers (Fagan & Iglesias, 1999; McBride, Rane, & Bae, 2001).

Research Questions

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Despite an increased interest in the role of fathers in children's development, more studies are needed to determine what early childhood educators are currently doing to involve fathers and which efforts appear to be more successful at accomplishing the desired outcomes. The present study, which was guided by the following research questions, is an attempt to contribute to our understanding of father involvement in the context of early childhood programs:

- What efforts, if any, are being made by early childhood educators to involve fathers in their programs?
- What are the specific staff efforts that lead to greater father involvement in early childhood programs?

Method

Sample and Procedure

The sample for this study was drawn from a series of early childhood educator regional training sessions conducted between June 2001 and February 2002 in a large southern state. Training sessions were conducted in three separate regions. The events included a general session and multiple breakout sessions, which allowed participants to rotate through various topics. The training sessions concentrated on general themes important to early childhood educators (e.g., child development, nutrition, health and safety issues, discipline) and were open to educators from a variety of public and private early childhood programs (e.g., Head Start, Even Start). Attendees were able to sign up and receive continuing education units or contact hours to fulfill state licensing requirements. Prior to training sessions, paper-and-pencil surveys were distributed in person to approximately 350 participants. Attendees were informed that the survey was strictly voluntary and confidential.

Of the 350 surveys distributed, 314 were partially or fully completed, for a return rate of approximately 90%. Surveys were then examined to assess whether or not they were complete. Out of 314 returned surveys, 213 surveys qualified as fully complete. Sample characteristics can be found in Table 1. As noted in the table, nearly all of the educators were female (98.6%). There was adequate variation in the racial/ethnic makeup of the sample, with Caucasians making up the majority (51.6%) followed by Hispanics (36.2%), African Americans (8.5%), Native Americans (2.3%), and other (1.4%). The vast majority of the respondents reported having obtained a high school diploma or greater (96.7%), but only 20% reported having graduated from college with an undergraduate or graduate degree. Nearly 90% of the early childhood educators in this sample worked in public or private early childhood programs other than Head Start or Even Start, while 5.6% percent worked with Head Start and 5.2% with Even Start.

Table 1
Sample Characteristics ($N = 213$)

Variable	%
Gender	
Female	98.6
Male	1.4
Ethnicity	
Caucasian	51.6
Hispanic	36.2
African American	8.5

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Native American	2.3
Other	1.4
Education Level	
< High School Diploma	3.3
High School Diploma	40.4
Some College	36.2
College Graduate	20.1
Income	
Under $20,000	28.6
$20,000-29,000	18.3
$30,000-39,000	16.9
$40,000 and above	36.2
Early Childhood Program	
Head Start	5.6
Even Start	5.2
Other	89.2

Instrumentation/Measurement

Efforts to Involve Fathers

To measure early childhood educators' efforts to involve fathers in their programs, an 8-item survey (excluding demographic items) was developed. Participants were asked the following question: "In my early childhood program, we… (a) Include a space on our enrollment for fathers to fill in their name, address, and telephone number; (b) Make a special effort to talk to fathers as they drop off and pick up their children; (c) Invite fathers to participate in parent-teacher conferences/meetings; (d) Send letters and written announcements to fathers (even if they do not live in the child's home); (e) Ask fathers to participate in special events sponsored by our center (e.g., field trips, potluck dinners, parties); (f) Invite fathers to the center to participate in educational activities with the children (e.g., read a book, talk about their jobs); (g) Ask fathers to participate on advisory boards or other special committees; and (h) Ask fathers to help maintain the facilities (e.g., paint, clean, build equipment, etc.)."

Response options to the above items ranged from 1 (Never) to 5 (Always). When combined to form a single measure of effort to involve fathers, this 8-item scale was shown to have good internal reliability. In the present study, 213 participants completed all items. Alpha reliability was .82 for the 8-item scale.

Success at Involving Fathers

Success at involving fathers was measured using a global item that asked participants the following question: "How successful are you at involving fathers in your early childhood program?" Response categories range from 1 (Very unsuccessful) to 5 (Very successful).

Results

Staff Efforts to Involve Fathers in Early Childhood Programs

The first research question asked, "What efforts, if any, are being made by early childhood educators to involve fathers in their programs?" In order to answer this question, frequencies were run on participants' responses to the 8-item scale as well as individual sub-items. Response categories ranged from 1 to 5; however, the response percentages on several of the items fell under 1%. Therefore, response categories were collapsed into the following three categories: (1) always or often, (2) sometimes, and (3) seldom or never. Examination of the results indicate that approximately 50% (51.2) of respondents often or always make efforts to involve fathers in their early childhood programs. Of the remaining 50%, just over a third (32.4%) reported that they sometimes make an effort to involve fathers, while less than 20% (16.4) seldom or never make similar efforts. Mean scores generated from the 8-item scale, along with the standard deviations and percentages, can be found in Table 2.

Table 2
Early Childhood Educators' Efforts to Involve Fathers
($N = 213$)

Variable	% Reporting Always or Often	% Reporting Sometimes	% Reporting Seldom or Never	*M*	*SD*
Father Involvement Efforts (8-item scale)	51.2	32.4	16.4	3.80	0.83
Ask for name on enrollment form	90.1	5.7	4.2	4.67	0.88
Talk to fathers	90.1	8.5	1.4	4.57	0.71
Invite to parent-teacher meetings	78.4	12.2	9.4	4.24	1.18
Send letters to fathers	41.2	25.9	32.9	3.15	1.40
Ask to participate in special events	71.9	15.0	13.1	4.08	1.24
Invite to educational activities	56.8	20.6	22.5	3.61	1.40
Ask to be on advisory boards	41.7	20.7	37.6	3.06	1.47
Facility maintenance	39.0	19.7	41.3	2.99	1.48

When items are considered separately, a slightly different picture emerges. On the first two items of the scale (i.e., include a space on the enrollment form for the father's name, address, and telephone number, and make a special effort to talk to fathers), over 90% of respondents indicated that they often or always make efforts in these areas. Percentages decrease with subsequent items; however, over 70% of respondents reported making strong efforts to invite fathers to parent-teacher conferences (78.4%) and ask them to participate in special events sponsored by their centers (71.9%). More than half of those surveyed

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reported that they invite fathers to educational activities at the center (56.8%), yet over 20% (22.5%) indicated that they seldom or never invite them to these events.

Approximately 40% of early childhood educators surveyed indicated that they always or often ask fathers to serve on advisory boards or special committees (41.7%) and ask fathers to help maintain the center facilities (39.0%), whereas a very similar percentage indicated that they seldom or never ask fathers to do the same (37.6 and 41.3%). Also of interest is the finding that over 40% of those surveyed (41.2%) reported that they send letters and written announcements to fathers even if they do not live in the child's home. In contrast, over 32% (32.9%) indicated that they seldom or never send letters and written announcements to fathers.

Staff Efforts That Lead to Greater Father Involvement in Early Childhood Programs

Question 2 asked, "What are the specific staff efforts that lead to greater father involvement in early childhood programs?" To arrive at an answer to this question, the 8 items in the aforementioned scale were treated as separate independent variables and were entered into a multiple regression equation. Overall success at involving fathers served as the dependent variable.

Table 3 presents the results of the multiple regression analysis, including standard error coefficients, unstandardized and standardized beta coefficients, and significance levels. Forty-three percent ($R^2 = .43$) of the variation in the dependent variable (success at involving fathers) was explained by the independent variables under consideration, $F(11, 201) = 14.73$, $p < .001$. The following variables significantly influenced early childhood educators' level of success at involving fathers in their programs: sending written correspondence to fathers even if they live apart from their children ($\beta = .30$, $p < .001$); including the father's name, address, and telephone number on the enrollment form ($\beta = .18$, $p < .01$); and inviting fathers to the center to participate in educational activities with their children ($\beta = .16$, $p < .05$). Each of these variables is discussed below.

Table 3
Results from Multiple Regression Analysis ($N = 213$)

Variable	*ß*	*SE ß*	*ß*
Ask for name on enrollment form	.213	.068	.18**
Talk to fathers	.105	.094	.07
Invite to parent-teacher meetings	.073	.064	.08
Send letters to fathers	.226	.045	.30***
Ask to participate in special events	.048	.066	.06
Invite to educational activities	.122	.061	.16*
Ask to be on advisory boards	.081	.058	.11
Facility maintenance	.028	.048	.04

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Note: *SE* = standard error.
*$p < .05$.
**$p < .01$.
***$p < .001$.

Discussion

Early childhood educators in this sample appear to value father involvement in their programs as evidenced by their efforts to include fathers in a variety of center-related activities. More than half of all of those surveyed indicated that they always or often make efforts to involve fathers, whereas slightly over 16% seldom or never make similar efforts.

When specific practices were examined, the majority of those surveyed made a special effort to involve fathers in five of the eight areas that were assessed. Early childhood educators were especially diligent to ask for the father's name on the application, make a special effort to talk to fathers, invite them to parent-teacher meetings, and ask them to participate in special events and educational activities sponsored by the center. It is also interesting to note that 40% of the respondents often or always send letters and written announcements to fathers even if they do not live in the child's home. This finding is important for two reasons. First, demographic data indicate that many children live apart from their fathers (Horn & Sylvester, 2002). Second, recent studies have found that, despite living apart from their fathers, children have some form of regular or consistent contact with their father or another male role model (Fagan, Newash, & Schloesser, 2000; Levine, 1993).

Results from the multiple regression analysis suggest that there may be specific efforts that appear to be more helpful than others at encouraging fathers to become involved in their children's early childhood programs. Sending written correspondence to fathers even if they live apart from their children was one of the strongest predictors of successful involvement as perceived by early childhood educators in this sample. As noted above, many children (possibly the majority) reside in homes in which their fathers do not live. In these situations, it cannot be assumed that information sent to one parent will be shared with the other. Frieman (1998) and Levine, Murphy, and Wilson (1998) note that special efforts must be made to keep fathers involved in their children's early learning environments, especially when dealing with divorced fathers. Levine, Murphy, and Wilson (1998) suggest duplicating copies of information about meetings, progress reports, and special events so that both parents have access to this important information.

The two other staff efforts that significantly influenced father participation in early childhood programs included leaving a space on the enrollment form for the father's name, address, and telephone number, and inviting fathers to participate in educational events at the centers. Similar to sending written correspondence to fathers, including a space on a program's enrollment form for the father's name and address is a simple measure that can help fathers and mothers understand that fathers' participation is highly valued by program staff. This practice also serves as a means of obtaining the father's contact information if he does not live in the child's home.

Inviting fathers to the centers to participate in educational activities can serve a number of positive purposes. When fathers are regularly invited to their children's educational activities, it encourages them to be involved, lets them know that their participation is welcome, has the potential to strengthen the educational experiences of children, and forges a stronger relationship between the family and school spheres (Epstein, 2001; Epstein et al., 2003; Frieman, 1998; Frieman & Berkeley, 2002). Activities that have been suggested, and in fact are being implemented in many early childhood programs across the country, include fathers reading to children in the classroom, coming to the centers to discuss their jobs and hobbies, participating on field trips, and leading educational demonstrations (Frieman, 1998; Frieman & Berkeley, 2002; Levine, Murphy, & Wilson, 1998).

Overall, the study lends support to Epstein's theory of "overlapping spheres of influence," which considers

the shared responsibilities of home, school, and community in promoting a positive learning environment for children. The present investigation considered one aspect of this framework by examining the role of the school (early childhood program) in fostering a greater connection with one segment of the family (i.e., fathers). Findings indicate that the majority of those surveyed make a concerted effort to involve fathers through various outreach methods. Over 90% reported that they obtain contact information for fathers at registration, and an equal percentage make a special effort to communicate with fathers once their children are enrolled. These special efforts on the part of early childhood educators to communicate with fathers of the children in their care enables them to gain a better understanding of the family and, in particular, the position of the father in the family. As educators grow in their knowledge and understanding of the home environment, they can seek to involve fathers in more in-depth ways in their children's early childhood programs (e.g., assisting with educational activities). Prior empirical studies indicate that regular attempts to bridge the home and school spheres enhance the likelihood that fathers will participate in their children's early childhood centers (Fagan & Iglesias, 1999).

Although this study provided valuable information regarding early childhood educators' efforts to involve fathers in their programs, it should be noted that there are limitations, particularly in the regression data, that must be taken into account. First, the dependent variable utilized to measure overall success at involving fathers was not an objective measure of father involvement. Rather, it assessed early childhood educators' perceived success at involving fathers in their programs. In this investigation, both independent and dependent variables were derived from the same source (i.e., early childhood educators' responses to survey items), increasing the likelihood of shared method variance. As a result, caution should be exercised when attempting to interpret and generalize the regression findings to other contexts. In future studies, it would be beneficial to collect data from other sources, such as the fathers themselves, or develop a measure that attempts to objectively assess the level of father involvement in their children's early childhood programs. For example, numerical records could be kept of father participation in parent-teacher conferences, special educational activities, and classroom volunteerism.

Second, although respectable in size, the sample used in the present investigation was not randomly selected; therefore, it may or may not be fully representative of early childhood programs across the nation. Some early childhood programs focus more attention on involving fathers than others, including allocating resources to hire male involvement coordinators. Naturally, efforts to increase father involvement will be greater in such organizations, because center policies are geared toward this goal. In subsequent studies, it would be interesting to randomly select a group of educators from various early childhood programs (e.g., Head Start, Even Start) to determine whether the type of program significantly influences the level of success at involving fathers.

Implications for Practitioners

The level of outreach to fathers reported by early childhood educators in this sample is consistent with the growing interest in male/father involvement in children's early care and education (Fagan, 1999; Fagan & Iglesias, 1999; Levine, Murphy, & Wilson, 1998; McBride, Rane, & Bae, 2001; Nord, Brimhall, & West, 1997). Early childhood programs across the nation are making concerted efforts to involve males/fathers in their programs, including hiring greater numbers of male staff members. Some programs have even taken steps to recruit and hire male involvement coordinators to increase male/father involvement in programs (Levine, Murphy, & Wilson, 1998).

Findings from this study and others (e.g., Fagan, 1999; Levine, Murphy, & Wilson, 1998) indicate that greater programmatic support of fathers in the form of specific efforts to involve fathers can increase the likelihood that fathers will participate in their children's early childhood programs. Very simple steps can be taken by early childhood educators and administrators to reach out to fathers and father figures. Actions that require minimal effort include leaving a space on the enrollment form for fathers to provide contact information and making a special effort to talk to fathers when they stop by the center.

Other activities or efforts that may require a greater commitment on the part of staff/administration include inviting fathers to participate in educational activities at the center (e.g., reading to children, participating in a career day in which fathers share what they do for a living with the children in the

program), sending correspondence to fathers even if they live apart from their children, asking certain fathers to participate on advisory committees, and organizing events where fathers can help maintain the facilities (e.g., paint the center). As fathers' participation increases in specific activities, it is likely that fathers will become more invested in their children's care and education (Fagan, 1999; Fagan & Iglesias, 1999; Levine, Murphy, & Wilson, 1998).

Conclusion

Decades of research have demonstrated that parental involvement in children's early care and education contributes significantly to children's potential for academic success. Recently, more attention has been directed toward father and father-figure involvement in this process. Evidence indicates that fathers contribute in valuable ways to their children's development when they are actively and positively involved in their lives. One arena in which fathers can contribute, which appears to have beneficial effects for children, is through participation in their early childhood programs. The present study examined early childhood educators' efforts to involve fathers and the specific efforts that led to greater father involvement in their centers. Findings suggest that efforts are being made to increase father involvement in a number of areas, and that there are simple, yet effective efforts that appear to increase the likelihood fathers will participate in their children's early childhood programs.

References

Cabrera, Natasha J.; Tamis-LeMonda, Catherine S.; Lamb, Michael E.; & Boller, Kimberly. (1999, August). *Measuring father involvement in the Early Head Start evaluation: A multidimensional conceptualization.* Paper presented at the National Conference on Health Statistics, Washington, DC. ED 451 904.

Eldridge, Dorothy. (2001). Parent involvement: It's worth the effort. *Young Children, 56*(4), 65-69. EJ 635 786.

Epstein, Joyce L. (2001). *School, family, and community partnerships: Preparing educators and improving schools.* Boulder, CO: Westview Press. ED 454 322.

Epstein, Joyce L.; Sanders, Mavis G.; Simon, Beth S.; Salinas, Karen Clark; Jansorn, Natalie R.; & Van Voorhis, Frances L. (2003). *School, family, and community partnerships: Your handbook for action* (2nd ed.). Thousand Oaks, CA: Corwin Press. ED 467 082.

Fagan, Jay. (1999). *Predictors of father and father figure involvement in pre-kindergarten Head Start.* Philadelphia: National Center on Fathers and Families, University of Pennsylvania. ED 454 982.

Fagan, Jay. (2000). Head Start fathers' daily hassles and involvement with their children. *Journal of Family Issues, 21*(3), 329-346. EJ 622 641.

Fagan, Jay, & Iglesias, Aquiles. (1999). Father involvement program effects on fathers, father figures, and their Head Start children: A quasi-experimental study. *Early Childhood Research Quarterly, 14*(2), 243-269. EJ 603 899.

Fagan, Jay; Newash, Nidhal; & Schloesser, Annmarie. (2000). Female caregivers' perceptions of fathers' and significant adult males' involvement with their Head Start children. *Families in Society, 81*(2), 186-196.

Federal Interagency Forum on Child and Family Statistics. (2001). *America's children: Key national indicators of well-being, 2001.* Washington, DC: U.S. Government Printing Office. ED 455 036.

BEST COPY AVAILABLE

Frieman, Barry B. (1998). What early childhood educators need to know about divorced fathers. *Early Childhood Education Journal, 25*(4), 239-241. EJ 569 170.

Frieman, Barry B., & Berkeley, Terry R. (2002). Encouraging fathers to participate in the school experiences of young children: The teacher's role. *Early Childhood Education Journal, 29*(3), 209-213. EJ 652 585.

Grolnick, Wendy S., & Slowiaczek, Maria L. (1994). Parents' involvement in children's schooling: A multidimensional conceptualization and motivational model. *Child Development, 65*(1), 237-252. EJ 478 223.

Henderson, Anne T., & Berla, Nancy (Eds.). (1994). *A new generation of evidence: The family is critical to student achievement.* Washington, DC: Center for Law and Education. ED 375 968.

Henderson, Anne T., & Mapp, Karen L. (2002). *A new wave of evidence: The impact of school, family, and community connections on student achievement.* Austin, TX: Southwest Educational Development Laboratory.

Horn, Wade F., & Sylvester, Tom. (2002). *Father facts* (4th ed.). Gaithersburg, MD: National Fatherhood Initiative.

Lamb, Michael E. (1997). The development of father-infant relationships. In Michael E. Lamb (Ed.), *The role of the father in child development* (pp. 104-120). New York: Wiley.

Levine, James A. (1993). Involving fathers in Head Start: A framework for public policy and program development. *Families in Society, 74*(1), 4-19.

Levine, James A.; Murphy, Dennis T.; & Wilson, Sherrill. (1998). *Getting men involved: Strategies for early childhood programs.* New York: Families and Work Institute. ED 388 399.

Levine, James A., & Pitt, Edward W. (1995). *New expectations: Community strategies for responsible fatherhood.* New York: Families and Work Institute. ED 393 557.

Marcon, Rebecca A. (1999). Positive relationships between parent school involvement and public school inner-city preschoolers' development and academic performance. *School Psychology Review, 28*(3), 395-412.

Marsiglio, William; Amato, Paul; Day, Randal D.; & Lamb, Michael E. (2000). Scholarship on fatherhood in the 1990s and beyond. *Journal of Marriage and the Family, 62*(4), 1173-1191.

McBride, Brent A., & Rane, Thomas R. (1997). Father/male involvement in early childhood programs: Issues and challenges. *Early Childhood Education Journal, 25*(1), 11-15. EJ 554 382.

McBride, Brent A.; Rane, Thomas R.; & Bae, Ji-Hi. (2001). Intervening with teachers to encourage father male involvement in early childhood programs. *Early Childhood Research Quarterly, 16*(1), 77-93. EJ 635 673.

Mosley, Jane, & Thompson, Elizabeth. (1995). Fathering behavior and child outcomes: The role of race and poverty. In William Marsiglio (Ed.), *Fatherhood: Contemporary theory, research, and social policy* (pp. 148-165). Thousand Oaks, CA: Sage. ED 387 230.

Nord, Christine W.; Brimhall, DeeAnn; & West, Jerry. (1997). *Fathers' involvement in their children's schools.* Washington, DC: U.S. Department of Education, Office of Educational Research and Improvement. ED 409 125.

BEST COPY AVAILABLE

Parke, Ross D. (1996). *Fatherhood.* Cambridge, MA: Harvard University Press.

Radin, Norma. (1986). The influence of fathers on their sons and daughters. *Social Work in Education, 8* (2), 77-91.

Radin, Norma. (1994). Primary-caregiving fathers in intact families. In Adele Eskeles Gottfried & Allen W. Gottfried (Eds.), *Redefining families: Implications for children's development* (pp. 55-97). New York: Plenum.

Snarey, John. (1993). *How fathers care for the next generation: A four-decade study.* Cambridge, MA: Harvard University Press. ED 366 432.

Starkey, Prentice, & Klein, Alice. (2000). Fostering parental support for children's mathematical development: An intervention with Head Start families. *Early Education and Development, 11*(5), 659-680. EJ 618 579.

Stevenson, David L., & Baker, David P. (1987). The family-school relation and the child's school performance. *Child Development, 58*(5), 1348-1357. EJ 362 736.

Turbiville, Vicki P.; Umbarger, Gardner T.; & Guthrie, Anne C. (2000). Fathers' involvement in programs for young children. *Young Children, 55*(4), 74-79. EJ 610 290.

Yogman, Michael W.; Kindlon, Daniel; & Earls, Felton. (1995). Father involvement and cognitive/behavioral outcomes of preterm infants. *Journal of the American Academy of Child and Adolescent Psychiatry, 34*(1), 58-66.

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The Llama Project

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Abstract

Four classes of 5- and 6-year-old children in a midwestern public school chose to study llamas. This article discusses how the project evolved, describes the three phases of the project, and provides teachers' reflections on the project. Photos taken during the project are included.

School and Student Background Information

Towne Meadow Elementary is a suburban school with approximately 720 children in kindergarten through fifth grade. There are four classes of kindergarten children. The kindergarten students attend on an alternating schedule two and one-half days per week. The Project Approach is used as the basis of the curriculum in all kindergarten classrooms. The kindergarten classes are staffed by two full-time teachers and two full-time assistants. There is also a generous amount of parent help, on a daily basis.

The Llama Project was conducted in all kindergarten classrooms, but because of the alternating schedule, only two classrooms were at school working on the project at the same time. The children were grouped by interest. This project was the first of the year, and none of the children had any previous experience with project work. Because our school is next door to a llama farm, and its owner, Dr. Riley, is willing to talk to the children about llamas, we have done this project three times. Each time, we gain new insight into the children and their thinking. This article is based on the second time we did the project.

Preliminary Planning and Selection of the Topic

Because we have a llama farm next door to our school, it was very natural for us to start talking about llamas. As we discussed them, the children quickly discovered that they knew quite a lot about llamas. All of the children had seen the llamas on their way to and from school, and some of the children had become aware of them when they came to an open house held in previous years. The discussion was easily started

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when the question was asked, "What do you know about the llama farm next door?" Because of the proximity of the llama farm, the children regularly observed the llamas and were therefore enthusiastic when they discussed new ideas at the beginning of the project. Even so, the children realized that there was much that they did not know about llamas. However, at this early point in the project, we neither affirmed nor negated what the children told us.

After a few days of discussion at morning circle, the children drew pictures about what they already knew about llamas. These pictures were drawn from the children's memories and experiences.

The teachers began their own discussion about beginning a project related to the llama farm. We felt that there was great interest in the topic; the fieldwork would be easily accessible because the llamas were so close; and Dr. Riley, owner of the llama farm, was very open to the idea of our visits. We also felt the topic was well within the realm of all of the children's experience.

Two big factors affected the planning of this project. First, because we would be outside to ask questions and interact with the llamas, we needed a time when the weather was suitable. Second, we wanted to give the children experience with the baby llamas (*crias*) and planned our visits around the time when Dr. Riley knew he would have newborn llamas.

The teachers documented the project as it developed. This documentation included drawings, transcribed conversations, photos, and any other items pertinent to the project. Documentation allowed children, parents, and other viewers to follow the progress of the project as it evolved through each stage. When the documentation was finished, the project unfolded like a story with a beginning, middle, and end. Many times, these displays sparked excitement, new ideas, or questions from the children.

Phase 1

Phase 1 includes discussing experiences, sharing knowledge and wondering aloud, raising questions, and preparing letters to parents.

The following activities took place during Phase 1 of the Llama Project:

- Sharing information about llamas at morning meeting
- Sharing experiences with llamas and talking about attending Dr. Riley's open house
- Documenting children's conversations in writing
- Walking over to the fence to allow the children to view the farm and the llamas
- Encouraging children to discuss the topic at home with their parents
- Writing down the children's ideas in the form of a web
- Helping the children write questions to ask Dr. Riley during our fieldwork

Group Discussion

Everyday at morning meeting, the children and teachers discussed llamas. The teachers started the conversations about llamas by asking questions, such as, "Do you see the animals next door when you come to school?" or "What do you think those animals are, and why are they there?" Llamas then became the topic of many interesting conversations. The children who had attended Dr. Riley's open house in previous years had many stories to tell. They told the other children about seeing the llamas do tricks and watching them get haircuts. These descriptions really interested the rest of the class. At this point in the project, we were only spending 15-20 minutes a day on the topic of llamas.

The children made the following comments during discussions at group meeting time:

> "I have seen llamas when I went to the 4-H fair, and we could touch them. They were very soft."

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"I have two llamas. We bought them from Dr. Riley. I get to help feed them and brush them." (The teacher was very surprised because this comment was not shared until the third day of the discussion. The little girl did have two llamas and did help care for them. To the other children, she became an instant and valuable resource!)

"I think llamas are really camels, but they don't have a hump."

"How did Mr. Riley get so many llamas?"

"My mom told me that llamas spit."

"I like to see the llamas when I come to school on the bus."

"My mom took me there when they had an open house, and I saw llamas do tricks. They can jump over things. They were also dressed up in clothes."

"Llamas don't wear clothes!"

"Yes, they do. I saw them. Ask my mom."

"Llamas have fur; they don't need clothes. That is why they have fur to keep them warm."

Teacher interjects: "It is almost 85 degrees outside today. Do you think the llamas get hot?"

"No, we give our llamas a haircut in the summer so they don't get hot."

"I think I saw the llamas next door get haircuts when I was there."

"I think they all look like they have haircuts when I drive by."

"I think I saw a purple llama at the zoo."

"No, you did not. They aren't purple!"

"Llamas can be any color I think 'cause God made them."

"Why does Dr. Riley have a blue llama on his fence?"

"When I saw the llama on the fence, it was pink."

By listening to the children, the teachers got a good idea of the types of knowledge the children already had. We decided that llamas would make a good topic because (1) the topic was something the children were excited about, (2) the llama farm was close to our school so we could give the children hands-on experiences, and (3) Dr. Riley was very willing to be our expert and allow us to visit his farm.

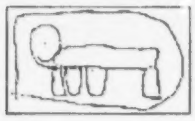
Many of the morning conversations were easily recorded. It is hard to record conversations of many groups working at the same time. Small tape recorders worked well for this type of recording, and the tapes could be listened to later. An assistant also took notes on a daily basis of the children's conversations. Many times, we use these conversations as a teaching tool later in the project or during the fieldwork. It was very easy to listen to the taped conversations after school or to have a parent transcribe them. From these conversations, we took notes and used them to help stimulate more conversations with the children.

Questions

The children started to ask the teachers questions about the llamas and the activities of llamas. Their interest presented an opportunity to keep a list. If a child asked a question during this part of the project, we would write it down on a large sheet of paper and explain to the children that we would get them answered when we visited Dr. Riley's llama farm.

Drawings

After a few days of discussion at morning circle, the children drew pictures about what they already knew about llamas. These pictures were drawn from the children's memories and experiences. It was interesting to see their perspectives of a llama. Here are just a few of the pictures that the children drew at the beginning of the project:



Figures 1-4. At the beginning of the project, the children drew llamas from their memories and experiences.

Before we asked the children to draw the llamas, we gave them many modeled lessons on drawing and many opportunities to practice. We talked about drawing and how things look. One teacher had taken a drawing class from Dr. Sylvia Chard and used many of the techniques she learned from the class to help the children. Two of the most important messages we gave the children were that everyone can draw and that they can look at anything as a shape.

The children were given special black pens to use for drawing because drawings made with these pens photocopy clearly. By hanging photocopies of the children's artwork in the hall, we don't risk damaging the children's original artwork. The children were also given pieces of cardboard cut into clipboard shape with two paper clips at the top to hold the drawing paper onto the cardboard. The children had experience using the clipboards when drawing things in the classroom or when drawing things they saw on nature walks.

A Visit through the Fence

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To keep the conversations exciting, the teachers decided to walk with the children over to the fence to view the llamas. We discussed what behavior was appropriate while at the fence. The children decided that we should be calm and quiet to get the llamas to come over to the fence.

The teachers decided to go in the morning to visit the llamas because we wanted to give the children the best opportunity to view the llamas. We had observed that the llamas were more active and more likely to be outside during the morning hours. We had noticed that as the day got hotter, the llamas went into the barn.

The children's excitement really rose the closer we got to the fence. The children carried clipboards and pens to draw what they saw. These drawings are very important as we go through a project. They help the children recall things they saw and what things looked like when the children make their representations later.

When we approached the fence, the llamas immediately came over to the fence because they are both tame and curious. The children were very excited. Here are some of the comments that we heard while at the fence, both observing the llamas and drawing them:

"Look at all of the llamas."

"Shhh! They are coming over to the fence."

"We have to be quiet, or they will run away."

"Do you think we can pet them?"

"Look! They are fighting."

"The babies are staying with their mommies."

"What are the babies doing?" (They were nursing.)

"They are eating."

"No, they aren't!"

"Yes, they are. Just like my sister. They are breast-feeding from their mommies."

"Mrs. Ganzel, is that right?" (I did not have time to answer before they were on to a new subject.)

Figure 5. The children visited the llamas at the fence.

After the excitement subsided, the children settled down to drawing the llamas. They did an excellent job of helping each other by giving suggestions on how to draw a llama and about what parts to put on the llama. Some children chose to draw only one llama, and others drew many. It was exciting for us as teachers to see some children represent three dimensions in their drawings. They would draw little circles or little x's to show that there was thick fur. This technique was something we had never discussed; it just occurred spontaneously.

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Topic Web

Although this project was our first of the year, creating the topic web for this project was not our first experience developing a topic web. Before we started this project, we had worked with the children and demonstrated how to make webs using topics with which they were familiar such as their families or our school family. This strategy was a good way for us to teach them to categorize using specific characteristics for the topics and then description words as subtopics. This experience helped the children when we got ready to create a web about llamas.

After many great discussions and drawings, we created a web of the llama topic with the children. As facilitators, we neither approved nor negated what the children wanted to put on the web. Truths and myths are for the children to discover during fieldwork. Because this web was the first that the children made, the teachers had to facilitate this process. We asked many specific questions about the llamas. On the web, we started with the topic *Eat and Drink*. We discussed what subtopics might be written under this heading. As we continued to develop the web, someone said that llamas were brown. The subtopic colors had not been written on the web, and we asked the children, "Where do you think we should put that? Does it have anything to do with what they eat? Should it have its own section and not be with the food? What does brown have to do with?" Someone answered, "Colors." We then said, "Let's put a color subtopic up. What other colors are llamas?" This process continued until the web was completed.

Many times, it takes two or three meetings to get a web to the point where specific areas to study emerge. For the Llama Project, we met three times and still added to our web as the children came up with more ideas. From this web, the children began to formulate ideas of what they still wanted to learn about llamas. During this process, the children talked to their families about llamas. As these discussions continued, the children came up with more items that were added to the web.

As you can see from the web below, the children had many great ideas when it came to llamas and what they wanted to study.

Figure 6. The teachers and children developed a llama topic web.

From the web, the children decided that we needed to study the following topics:

- How Llamas Protect Themselves
- Where Llamas Live
- What Llamas Eat and Drink
- How Do Llamas Sleep?
- Colors of Llamas
- Fur
- Llama Babies
- What Llamas Do
- The Llama Farm
- Grooming Llamas
- Parts of a Llama

Questions

Once the children had decided what topics they would study, they then decided which group they would like to join. Each group's goal was to come up with a list of questions that the children would ask when

they went to do their fieldwork at the llama farm.

Up until this point, we had been working with the children on questions, discussing what is considered a question. We had also demonstrated through our own interactions and role-playing how the members of a group interact when working together. We were very specific in our role-playing. We wanted the children to learn to self-monitor their group rather than always needing the teacher to settle disputes or deal with children not on task.

During this modeling, one teacher took on the role of a student who was not on task, while the other teacher played the role of the student who was trying to complete the task. Through this role-play, we demonstrated the use of language that enabled the children to interact positively in order to complete the question writing. It was very exciting to see the children use many of the strategies we had given them for working in small groups.

In their groups, the children worked to write at least one question each. The time of the year determines how much writing the children do themselves and how much the adults in the room do for them. We encourage them to write as much as possible. Because the Llama Project was our first one of the year, adults did a lot of the note taking in each group. Two teachers, two assistants, and usually two parents were involved in our group work with the two classes.

Figure 7-9. Each child in a group wrote a question.

We were very impressed by how well the children came up with questions relating to their topic. All of the children participated in formulating the questions. Once a child formulated a question, he or she was very good at remembering that question when we did our fieldwork.

After the first meeting (approximately 20 minutes) of the small groups, the children came back together as one large group for about 15 minutes. We discussed the subjects of their groups and some of the questions they had written. Children from other groups gave suggestions for additional questions. This meeting was a time of great interaction and dialogue among the children. Many times, the children in a group responded positively to the suggestions by saying things like, "That was a great question" and then wrote the suggestion in their notes. Sometimes children in a group would respond by saying that they thought it was a good question but not one that their group wanted to ask. As the teachers, we added it to our list of questions to ask the expert.

After the children had met in their small groups once to write questions, they then met with a teacher. During this time, the teachers discussed their questions, talked about which question belonged to whom, and, finally, helped them brainstorm more ideas by asking questions of the group. For instance, the "Where Llamas Live" group was having a difficult time asking questions pertinent to their topic. With this

process, the teachers were able to guide the group toward the goal of writing appropriate questions about their topic.

The children then met a second time to add additional questions to their lists. Before the second meeting, we encouraged the children to go home and discuss their category with their families and see what questions their families had about the topic. The second meeting was shorter than the first meeting. Again, we came back together as a whole group and spent 15 minutes discussing what questions we would ask, allowing the rest of the children to add to the list.

Here are some of the questions the children wrote:

GROUP	QUESTIONS
Fur	• How do they take a bath with their fur? • What color is their fur? • How do they scratch their fur? • How long does the fur grow? • How fluffy can their fur be? • What do they do with the fur? • What colors do they change to?
Llama Babies	• How do babies drink? • How do babies go places? • How do babies eat? • How do babies play with their mommy? • Do they cry? • How/when do they walk? • Do they get scared? • How do they get food? • Do babies fight? • How do they grow?
What Llamas Do	• How do they communicate? • Do they walk? • Do they paint? • Can they climb? • Do they play nicely? • Do they get angry at each other? • Do llamas sleep? • Can they lie down? • Are they afraid of shadows? • Can they jump? • Do they do tricks?
The Llama Farm	• Do you keep an eye on the llamas? • Where do the babies sleep? • Why do they have a garage? • Why do they have the fence? • Where did they get the fence? • Where did they get all of the llama stuff? • What do you keep in the barns? • Where do you keep the food?
How Llamas Protect Themselves	• Do llamas kick? • Do they roll over on small things to squish them? • Do llamas run away from bees? • Do llamas use their tails? • Do llamas use their teeth? • Do they protect themselves by running? • Will they run into dark, dingy caves to get away from

	cheetahs?
Where Llamas Live	• Do they live in a zoo, rainforest, desert, snow mountains, or woods? • Do they live in Florida? • Do they live in Africa? • Can they live in Disney World? • Do they live all over the world? • What kind of houses do they live in?
What Llamas Eat and Drink	• What do they drink out of? • Do they eat llama food? • What do they eat food out of? • What do they drink? • Can they drink milk? • What do they eat? • Do they eat grass? • Do they eat carrots? • Where do they eat and drink? • When do they eat?
How Do Llamas Sleep?	• Do llamas dream? • How do they sleep? • Do they sleep by fences? • Do they sleep in/by the barn? • Do they sleep in the hay? • Do they nap in the sun? • Do they sleep on a bed? • Where do llamas sleep? • What do they sleep on? • Do they sleep outside? • Do they lie down when they sleep?
Colors of Llamas	• Can they be black? • Can they be gray? • Can they be white? • Can they be brown? • Can they be rainbow? • Could they be yellow? • What colors are llamas?
Grooming Llamas	• Who grooms their feet? • Who cuts their hair? • Do they have a barber? • What tools do you use to cut their hair? • Where do they put all of the hair? • Who grooms them on their back? • Who cuts their hair on their stomach? • How does the farmer rub their back?
Parts of Llamas	• Do llamas have toes? • Do llamas have all the parts people have? • How do you know if it is a boy llama? • Do llamas have tails? • Can llamas smell? • Do llamas have teeth?

Teacher Reflections on Phase 1

Because this project was the first of the year, each step took quite a long time because we model every

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step in detail for the children. We have found that modeling allows the children to see and to meet our expectations. We give them the tools to handle many of the situations that may occur while they are working in their small groups. The explanation of role-playing/modeling in the Questions section was only one of the many times we used this style for teaching the children how to work toward completion of an assigned task.

We have found that role-playing and modeling are an excellent teaching tool in our classrooms. The concepts taught carry over to daily learning in the classroom. Some of the situations we have eliminated through the role-playing/modeling are off-task behaviors, questions or drawings that were not on topic, and children not allowing group cooperation to occur.

Before beginning the project, we started to work on writing questions and questioning techniques. We discussed in detail how to write good questions and questions that relate to their topic. We also felt that it was important for the children to have time to meet with the teacher in their individual groups during the question-writing process. This approach allowed us time to focus on the groups of children who had a difficult time writing their questions and to work through the questioning process with them.

At this point in the project, it was a delight to see how excited the children were about the llamas and the preparations we were making to visit the llama farm. The excitement of the children really motivated us and reassured us that all of the hard work we were putting into this project had enhanced the children's learning. It was also a thrill to see the children work through the processes of the project. By the time we were ready to go to the llama farm, the children's questions were of a high quality for 5-year-olds.

Phase 2

Phase 2 consists of fieldwork, discussing activities that are taking place in small groups, investigating questions that were formulated in Phase 1, visiting experts, representing information children learned during their investigations, and creating displays to share their new knowledge.

The following activities took place during Phase 2 of the Llama Project:

- Preparing for fieldwork
- Taking notes
- Doing the fieldwork
- Having whole group and small group discussions
- Planning the representations
- Making the representations of knowledge gained

Preparing for Fieldwork

After the children decided on what information they needed to know, it was time to visit the llama farm. We were lucky to be able to walk next door to see the llamas. The owner, Dr. Riley, was very nice and accommodated us well. He allowed us to visit in small groups every morning for a week! We decided that with so many students involved in the project, we needed to visit on four different days.

We, as the teachers, have a responsibility for providing good-quality fieldwork. When we set up a fieldwork visit, we discuss, in detail, with the owner, manager, or expert what the children need from the visit. We have to be very specific so that we are not herded through the facility as a whole group, unable to ask the questions that the children have written.

The day of the visit to the llama farm finally arrived for the first group of children. Each of the teachers took turns taking small groups (8-10) of children to the llama farm. We also took an assistant to help the children and to take notes. The children also took clipboards and pens to take notes. Many times, these notes were needed for reference when the children were in the representational stage of the project.

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Note Taking

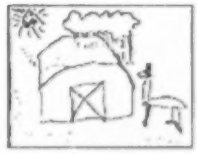
Each child was expected to take notes during the fieldwork. Before we went to the llama farm, the children were taught note-taking skills and were able to practice. We discussed what was appropriate and what was not appropriate to put in their notes. We also allowed time to take the clipboards outside on a nature walk to help the children learn to take notes. As we went on our nature walk, the teachers also had clipboards. We let the children hear us talk about some of the things we thought were important to write or draw about. This practice again goes along with our philosophy of modeling for the children. We then came back into the classroom and discussed their note taking. We talked about what they had written/drawn and what it meant to them now that they were back in the classroom. We showed them our notes and discussed the importance of what and why something was drawn and what and why something was written.

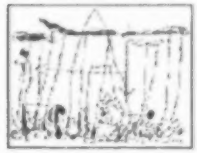
Fieldwork

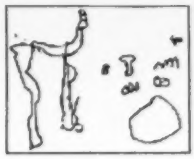
The children were very excited to go to the llama farm for their fieldwork. They had worked very hard up until this point to be sure that their questions were the "right" questions! The children knew that while they were at the llama farm, they were responsible for asking questions, making sketches, and gathering other pertinent information. This process was discussed and practiced in the classroom before we went on the field visit.

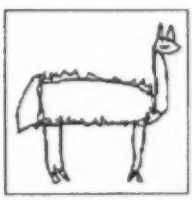
At the llama farm, children drew or wrote the information at their own developmental level. It was interesting to see what they felt was important to write or d.aw about. They also copied words from environmental print and drew items that they observed at the site.

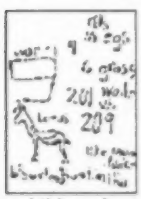
Some of the things that the children drew were the llamas, parts of the barn, specific items that had to do with their topic, some of the signs around the farm, the trailer that the llamas rode in, and, of course, Dr. Riley.











Figures 10-18. At the llama farm, the children drew or wrote about what they observed.

Figure 19. Jonathan drew a llama that showed the two toes.

Figure 20. Students sketched a llama as Dr. Riley explained the different parts of llamas.

Figure 21. Jack wrote information about the llama's food.

Figure 22. Alyssa used many details in her drawing of a llama.

Figure 23. Dr. Riley explained to the children the different types of food needed to keep the llamas healthy.

Figure 24. Dr. Riley introduced a baby llama to the children.

Figure 25. The children excitedly took turns petting the llama and were surprised at how soft it was.

Figure 26. Laura was intensely sketching a llama.

Figure 27. Dr. Riley explained to the children the many uses of llamas.

Figure 28. Michael nervously petted the llama being introduced to him by Dr. Riley.

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Dr. Riley was an excellent expert. Because this was our second year that we visited, he felt comfortable with the children and the routine. He always gave them plenty of time to draw. He was also good at allowing the children to ask all of their questions first before giving the children any other information. He always directed his questions to the children, not the teachers. He also made sure that everyone had a chance to ask his or her question.

Dr. Riley was very well prepared for us. If the fur group was coming, he not only had many types of fur for them to take back to school but also had many items for them to see and draw that were made from llama fur.

Figures 29-30. Dr. Riley showed items made of llama fur.

Dr. Riley felt so comfortable with the children's behavior that he allowed us to go into the field with the llamas to see where they ate and slept. He knew that he could tell the children what his expectations were for behavior, and these expectations would be met!

Going to the llama farm is a fantastic experience for both the children and the teachers. Dr. Riley also enjoys our visits! He likes to see what the children have done to represent what they have learned, and he always comes to the children's sharing day.

We also take many, many photographs to help the children remember what they saw when they work on their representations after the visits. After experiencing several projects, we quickly learned what types of items the children were interested in remembering. The small details usually interest them the most. We also encourage the children to tell us what photographs they need/want to help them with their topic.

While working on this project, the teachers kept a lot of notes on what the children said and things they asked. When we went to visit the llama farm, a child asked a very humorous question:

Dr. Riley: "Who has a question?"
Max: "I do."
Dr. Riley: "What is it?"
Max: "Is your mama a llama?"
Dr. Riley: "No, but my best friends are."

Max had read the book *Is Your Mama a Llama?* by Deborah Guarino and very innocently asked the question. Dr. Riley very nicely answered it but in a different context. Dr. Riley had never heard of the children's book. We decided to give it to him on one of our future trips to the farm.

Group Discussion

After everyone had gone to the llama farm, we had a group discussion about things they wanted to share, things they had discovered, or things they had learned. The children were most surprised by the colors of the llamas. They were excited to share with everyone the fact that there were no pink or purple llamas. The other subject of conversation was the fact that the llamas came from South America originally. This

conversation was a great opportunity to discuss that we lived in Indiana and that was certainly a long way from South America. The children were excited to see how far the llamas had to be brought to come to North America. We also looked at the mountains on the Internet to see what they looked like.

At this point, we also looked at the topic web to see if there were things that we wanted to remove or change. The two big changes were where llamas lived and the colors. We put all of the children's ideas on the web at the beginning because they remember so much better the facts they learn when they discover them from an expert such as Dr. Riley rather than from the teachers when we make the web.

Small Group Discussions

After talking in a large group in the morning, the children divided into their topic groups in the afternoon to discuss what they had learned and to share their field notes with each other. It was exciting for us to hear the children's conversations. They took their job to collect information seriously. The children knew that our next step was planning their representations, and many started these discussions at this time.

Planning

Because this project was our first, the children needed a lot of guidance to come up with something that would represent what they had learned. Again, as in earlier parts of the project, we do a lot of modeling for the children. We were very specific about the objectives for the children. We have learned that if we take a lot of time working with the children during the planning process, the representations are of a much higher quality.

First, with the children, we brainstormed all of the different ways we could make representations. The children had used many different types of media by this point. Many of them have older brothers and sisters and have watched them complete projects at home using even more media than we have used at school. The children decided that they could do any of the following: write a book, make a poster, make a model, use clay, make a diorama, use papier-mâché, or use paint to make their representations. This brainstorming occurred during one large group session.

Second, during our next meeting with the children, we talked about the requirements for completing the representation. We had the following expectations for each group:

- They all were expected to work cooperatively; even if a child's idea was not chosen, he or she still had to participate.
- Everyone had a task to complete in the final representation.
- All groups had to have a group plan drawn or written.
- Everyone had to decide what each person in the group would do to help complete the representation.
- Each group had to meet with the teacher after completing the group's plans.

Third, we demonstrated what it was like to be in a group and negotiate an agreement about what we would make. To model this step for the children, we chose a topic that did not pertain to llamas. Instead, we used the topic of the veterinarian, and our pretend group was cats. We chose a different topic so that the children did not do exactly what we did. Rather, they would have to come up with their own idea. In front of the children, we talked about what we had learned in our group, what we could make to show the rest of our friends what we had learned, what the final product would look like, and who would do each part.

Fourth, we let the children go through the same procedures that we had modeled, and they planned their representation. When they had completed their drawings and had decided what each of their jobs would be, they met with a teacher. When the children met with the teacher, they explained their plan for their representations. The teacher asked questions about their plan and took notes to be sure that they all understood what they would be doing. The children then worked together, with the teacher, to decide what materials were needed and who would get the materials.

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The "Parts of a Llama" group decided to use papier-mâché to make a llama. When the children met with the teacher, it was a great opportunity to discuss with them whether they really knew what papier-mâché was. Some of the children in the group did know, and some did not. After the teacher explained the process to them, the whole group was excited to use this medium to complete their task. Another group overheard this group talking and decided to also make their mountain out of papier-mâché.

After meeting with the small groups, the teachers got together to decide whether they had the materials, how they could get the materials, what materials the children needed to bring, and which groups the teachers would need to work with to get started. Because papier-mâché was a new medium to some children in the two groups that wanted to use it, one teacher worked with these children to teach them how to use it.

Fifth, we had one more large group meeting. At this meeting, each group of children reported to the rest of the class what they were making and what materials they planned to use. A few groups needed common materials such as straws or various sized boxes. They asked the whole group to bring these items from home if they had them and had permission from their parents. This strategy again makes a home/school connection and enables the families to be involved.

Sixth, we explained and again modeled the specific requirements for the finished product:

- Everyone must do his or her part but at the same time work together.
- Everyone must help gather materials and help clean up.
- All finished pieces or parts must be labeled so that everyone can understand the representation.
- There must be a title (usually the group name).
- Everyone's name in the group must be on the finished product.

We also showed the children a finished example from one of our other projects and talked about what made it a great example.

The following photos show the children in the planning stage. Notice how intense they are!

Figure 31. Looking at their notes, students discussed ideas of ways to represent knowledge gained.

Figure 32. Students shared with each other their thoughts on the most important part of their field notes.

Making the Representations of Knowledge Gained

Finally, the children began work on their representations. To give children individualized attention during the first time we worked, four adults worked with five of the groups (or half of the children) at one time. The remaining half of the children worked with hands-on language arts and math materials in the room next door. Having this ratio was really important because this project was our first and therefore the children needed a lot of help to get started. We had put out many of the materials that they would need in one central location. They also knew where many of the other materials were stored in the classroom because they used them daily. As the children became involved in their work, the adults roamed the room asking questions and giving encouragement. Here are some of the things you could hear the adults saying:

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- "You are working well together."
- "Can I help by getting any materials you don't see in the room?"
- "That is looking great!"
- "How are you going to put that together?"
- "Have you looked at your field notes to check that?"

We have learned from our past experiences that the children need large blocks of time in which to truly become engaged and to thoroughly complete their tasks. The children are very highly motivated once they get started. It is very hard for them to stop what they are doing and then have the same high level of motivation on the next day. We like to give them enough time so that they can get a large portion of their representations completed before having to clean up their area.

Putting work that is in progress away and coming back to it the next day also has its benefits. The children have a fresh eye for their work, and most complete their part of the project the second day. Many make changes that improve the quality of their final product.

Figure 33. Children worked hard making the components to put their poster together.

Figure 34. Students shared with the teacher the progress they made.

Figure 35. Evan put the finishing touches on his group's poster.

Figure 36. Amy was getting help from Mrs. George on how to write the title of her group's poster.

View of One Group

While three adults roamed the room, one teacher worked with the two small groups that were learning how to use papier-mâché. The teacher demonstrated the technique and offered some suggestions for the base part of the llama and mountain. Using a large quantity of newspaper and rolls of masking tape, the children completed their bases on which they would add the papier-mâché. The children had to work out many problems to get the llama to stay together and to stand up! With the help of a lot of leading questions from the teacher and a lot of problem solving, the children finally completed a life-size baby llama base that they would complete with papier-mâché.

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Figure 37. Students worked together to form the base of the mountain and a llama out of papier-mâché.

Figure 38. It took lots of masking tape to form the base for one of the llama's legs.

The papier-mâché was mixed, and the strips were torn. The teacher again showed the children how to dip the strips, wipe off the extra solution, and to wrap the base. The first child who put his hands in the mâché solution gagged and vomited on the base of the llama! We could not throw it away, so being dedicated teachers, we got the nurse to help us decide what we could do. One of the teachers put on rubber gloves and cleaned up the llama. Fortunately, the vomit had only gotten on the neck of the llama. The nurse suggested that the llama be sprayed with disinfectant and that the teacher wrap the neck. The next day, the children took over the process of completing the llama.

Figure 39. The children were excited to finally get their hands into the papier-mâché.

Figure 40. Susan carefully re- oved the excess paste from a newspaper strip.

Figure 41. Susan put the final touches on the mountain.

After the papier-mâché llama dried, the children decided not only to paint the llama but also to add real llama fur to it. Dr. Riley was very happy to supply the fur. The students did not really need help, but they did need guidance to complete the llama. Because we had so many adults in the room, it was easy for one teacher to serve as their resource.

Figure 42. Mrs. Stuglik was the one chosen to help mix glue, paint, and fur to complete the llama.

Other Groups

Each group had its own unique representation. The children made the following things to represent what they had learned about their aspect of the topic of llamas. The photos show some of the children's final products.

Name of Group	Representation
How Llamas Protect Themselves	3-D models from paper, clay, and wire
Where Llamas Live	Papier-mâché mountain and clay llamas
What Llamas Eat and Drink	Diorama and paper llamas
How Do Llamas Sleep?	Diorama and clay llamas
Colors of Llamas	Clay llamas
Fur	Book of clothes you can make from fur
Llama Babies	Poster about babies
What Llamas Do	Puppets and puppet show
The Llama Farm	Map of the llama farm
Grooming Llamas	Book with photos of the tools and pictures of llamas
Parts of Llamas	Papier-mâché and fur 3-D llama

Figure 43. This group made puppets and wrote a puppet show about what llamas do.

Figure 44. This group chose many different media to represent how llamas protect themselves.

Writing

After the children finished their representations, they worked with a teacher to write about their topic. The children dictated to a teacher as she typed on the computer. The children told the story of their part of the project (or what they remembered) in sequence. Their photo with their project was added to the text and hung up with their finished representation. The text was typed exactly as the children dictated it. This task is an excellent recall and sequencing activity for the children. The following transcript was dictated by the group that studied parts of the llama.

Parts of a Llama
Dictated by
Joe, Martha, Cathy, Hank, and Samuel

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"We were in our writing questions. We went to the llama farm. We seed the llamas. We checked them out and petted. We looked at the babies. We ask Mr. Riley some questions. We drawed a picture of a llama. We wrote the things we saw. We showed somebody our pictures.

We wanted to make a llama; one big llama. We all wanted to do papier-mâché. We rolled some paper and put tape around it. We took strips of paper and put it in papier-mâché. We wrapped it around the llamas. It had to dry. We painted it and put llama fur on it. We looked at their teeth. We put on eyes and a nose. We put on our labels."

Samuel: "I helped make the legs and roll them and tape them. I put on the nose. I put on fur. I put on labels."

Hank: "I helped Cathy with one leg and roll it. I helped tape. I put on the papier-mâché. We got it all over us. We painted it. I put fur on. I put the labels on."

Cathy: "I rolled the legs. I papier-mâchéd the body and the legs. It was sticky to me! I put on the fur and labels."

Martha: "I rolled up the body, and Joe and Hank taped it. I did a lot of gluing and papier-mâché. It was gooshy. Then I painted, and Mrs. Stuglik helped with the fur. We had fur on out shoes. I made labels."

Joe: "I did the legs and the taping. I papier-mâchéd. Mrs. Ganzel helped me, and Samuel helped me. It was really messy. I was very covered. I put furn on it. I put labels on it."

Figure 45. This was the group who was so determined to use papier-mâché. Their final product looks great!

Teacher Reflections on Phase 2

As the children began the representations, at first glance, the classroom appeared to be in chaos. When the onlookers continued to observe, they saw that the children were very focused in their activities. As teachers, we felt very frazzled for the first 10-15 minutes as we organized all of the materials. Of course, the children needed them "now!" Once the children became engaged, it was a joy to walk around giving encouragement, questioning the children, and seeing their deep absorption in what they were doing. We also enjoyed observing the children and taking notes on individual strengths and weaknesses.

One of the most interesting things that we observed was how every child was able to fully participate regardless of his or her developmental level. The children in the groups seemed to know what skills each had and quickly took advantage of them. Even our children with special needs were given jobs by the rest of their group that they could complete, which helped them feel successful!

When the representations were finished and we viewed the completed projects, we were very proud of both the children's and our accomplishments. To finally see all of our hard work pay off and to see that the children were successful in the task that was presented to them validated not only what we do as teachers but also the importance of project work.

Phase 3

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Phase 3 includes the sharing of the representations with others and the introduction of fantasy to the topic.

The following activities took place during Phase 3 of the Llama Project:

- Sharing with the other students
- Writing a letter to parents about our sharing
- Creating a rubric for parents about how their children performed in the project
- Sharing the story of the project with parents, including the final representation
- Viewing a cartoon movie about llamas
- Reflecting on the entire project by the teachers

Sharing with Other Students

After all the children had completed both their representations and the "typing," they were ready to share both the knowledge they had gained and their representations with the other students in the classroom. The teachers modeled their expectations for the group presentations. We demonstrated through role-playing a sample presentation for the children. We portrayed various roles of children making presentations. This role-play included all of the requirements for an informative group presentation:

- Title of their project
- Explanation of what they had learned
- Explanation of the questions they had asked and the answers they had received
- Explanation of what they had made to represent the knowledge gained about their specific topic
- Explanation of why they chose their materials in their final product
- Explanation of how they made the representation

The teachers also asked that everyone in the group speak during the presentation. Up until this point, the children had many opportunities to talk in front of the rest of the group, and most children felt comfortable doing so.

The children were given time to meet in their topic groups and decide what they would share with the other children and who would share which information. The children were also instructed on how to be a polite audience.

Most groups did an excellent job of presenting. The children were very quick to help one another in their group. If a child got stuck or could not remember what to say, another child in the group would whisper information to that child. Because this group presentation was the children's first of the year, interactions between the teacher and each of the groups occurred. The teachers asked the children leading questions so that the groups would share the information important to the group's topic. Some of the groups needed a lot more questioning from the teachers than did other groups.

Presentations for Parents

After the children had shared with their peers, they decided to celebrate their success with their parents. We decided on a day and sent a note, two weeks in advance, to the parents to inform them of the sharing event. For this project, we were able to have the sharing coincide with the parent conferences. Because the conferences were student led, this sharing event was one more learning experience the children were able to share with their family. We also sent information home to the parents about the project and about their child's participation in the project.

When the parents came to view our work, their child was responsible for giving them a tour of not only the work that he or she accomplished in the project but other children's accomplishments as well. We provided a four-page "Tour Brochure" to help the parents know what questions to ask their tour guide (their child). The front contained the title and a picture drawn by a student. The middle two pages gave the parents information about all of the documentation hanging on the wall and specific questions to ask their

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child. The last page listed what Indiana Academic Standards were covered during the Llama Project.

Thank you for coming today. Our Llama Project was great! We were so lucky to have Mr. Riley and his llama farm next door. We have had many wonderful conversations about llamas. The children really enjoyed this project and we saw a lot of growth in the children and their ability to work cooperatively in groups. The children have also gained a lot of knowledge about llamas. Here are a few hints to help you have a fantastic tour. · Please be sure to keep little ones with you. · Be sure to obtain a tour guide (your child) · Be sure to look at all documentation (typewritten explanations and pictures) on the wall. This will help to give an idea of what you are viewing. · On the following page is a list of questions for you to ask your tour guide. · Have fun and enjoy!	Here are the questions your tour guide should be able to answer: (The projects are on the wall and on the table.) 1. Which Project is yours? 2. Who was in your group? 3. How did you make your Project? 4. What part did you make? 5. What was the hardest part? 6. What was the easiest part? 7. Can you tell me about someone else's Project? 8. What was your favorite part of this Project? 9. What did you learn from this Project? 10. If you could be in another group, which group would you choose? / Why? 11. Show me the pictures of your visit to the llama farm.

Figure 46a. The middle of a brochure for parents.

Skills and Indiana Academic Standards practiced during the Llama Project

- Questioning (Sci. K1.1)
- Writing for a specific purpose (L.A. K.5.2)
- Writing using pictures, letters, or words (LA K.4.3)
- Taking notes (LA K.4.4)
- Write moving from left to right (LA K.4.5)
- Identifying everyday print (LA K.3.2)
- Understand and follow one and two step directions (LA K.7.1)
- Share information and ideas (LA K.7.2)
- Describe people, places, and things (LA K.7.3)
- Tell a story in a logical sequence LA K.7.5)
- Identify and order events that take place in sequence (S.S. K.1.4)
- Identify rules (SS K.2.5)
- Learning about people in the community (SS K.3.3)
- Identify different kinds of jobs of people (S.S.K. 4.1)
- Counting (SCI K.2.1; Ma. K.1.6)
- Draw and write about experiences (SCI K.2.2)
- Make comparisons (Ma. K.5.1)
- Use objects from real world as subject matter for art work (V.A. K.7.1)
- Identify and use media and processes to express ideas and experiences (VA K.9.2)
- Students will be able to sing alone or in group (Mu. K.1.)
- Plays instrument alone and together (Mu. K.2.1)
- Composing (Music)

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Figure 46b. The last page of the brochure.

Figure 47. Mary was intensely explaining to her mother the pre-drawings of llamas.

Figure 48. Jerry showed his mother what he made to represent his knowledge gained.

Figure 49. Ellen explained to her dad what she thought llamas looked like before she went to the llama farm.

Figure 50. Michael shared with his dad all of his group's hard work on their final product. He was really excited about their typed explanation.

Figure 51. Sue excitedly pointed to the question that she wrote before going to the llama farm.

The letter below was sent to parents about a week before they came to view the project.

Letter to Parents

As you know, for the last few weeks we have been working on our Llama Project. We had many goals when working on this project. The children have been learning how to work in small groups cooperatively, write and ask questions, research a topic through the use of an expert, complete a representation, and make group presentations.

The process the children went through to complete the Llama Project included many steps. First, the children chose a group to be in, by topic. Second, they developed questions to ask Mr. Riley when they visited the llama farm. Third, they asked the questions when they went to the llama farm and took notes. Fourth, they met as a topic group and discussed the answers and how they could

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represent what they had learned. Finally, they worked as a cooperative group to complete their representation and make a presentation to the rest of the children about their topic. You have been invited to visit our Llama Project on Thursday, November 4.

Some things for you to look for when you come to visit our Llama Project are: did your child do an equal part of the representation; was your child's part of the representation on the group's chosen topic; can or has your child told you about the process used to complete the representation of their group's topic?

As the children worked through the Llama Project, they were observed in three areas. On the next page is a rubric that will inform you of your child's cooperation and participation in this project.

Rubric

We used the following rubric with the children. This rubric provided parents with a lot of information and answered many of the questions that they had about how much their child participated in the project. To be able to fill out the rubric for each child, we kept daily notes about what we observed as the children worked. Note that the rubric is a continuum and does not have a point value. Our goal was not to grade the children but to provide valuable information for the children, the parents, and the teachers.

Rubric

Cooperation in Group Work

Worked alone; did not participate as a member of the group	Participated in group discussions but little or none of the work	Participated/contributed to the group, but did his/her work independently	Worked entirely as a cooperative member of the group

Individual Work

Displayed inappropriate behavior during project time	On task part of the time; displayed some inappropriate behaviors	On task and displayed appropriate behavior most of the time	Always on task and displayed appropriate behavior

Group Presentation

Did not talk during group presentation	Participated with teacher encouragement	Fully participated in the group presentation	Fully participated in the group presentation and encouraged (helped) other members

Fantasy

For our celebration of all of our great work on the project, we read a couple of fiction books about llamas

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and allowed the children to watch an animated movie about llamas.

Teacher Reflections on Phase 3

It is wonderful to reflect on the entire project at the time of its completion. It gave us time to celebrate the accomplishments of the children. We also thought about best teaching practices. We needed to understand what worked well for the children and what was difficult for the children, so that we could make adjustments during the next project.

It was wonderful to see and hear the interactions between the children and their parents or special guests. It was great to see the children take on their new roles as teachers/experts while their parents were the learners. These interactions were both thought provoking and humorous.

As this project was our first of the year with these children, the parents had never actually experienced project work except through our weekly newsletters and information provided by their child. Up until this point, parents had only experienced children's learning through teacher-led activities. The parents were both pleased and surprised by the wealth of knowledge and the skills gained throughout the project. One of the "ahh-ha's" for the parents was when they realized that this project had meaning and purpose, was a true learning experience, and was not unstructured chaos as they might have thought when reading the newsletters or working in the classroom.

Upon final reflection on the Llama Project, we as teachers are reinforced by knowing that through the framework provided by the Project Approach, the children had valuable and insightful learning experiences.

Author Information

Candy Ganzel teaches full-day kindergarten at Towne Meadow Elementary in Carmel, Indiana. Candy has a B.S. degree in elementary education with an endorsement in kindergarten and a M.S. in early childhood education from Indiana University. Candy continues to learn about project work through her association with both the Indiana Project Group and the Illinois Project Group. She has been instrumental in the organization of the Indiana group. She also teaches workshops on using project work in the classroom.

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